

TENSE PRESENT

In Niger-Congo

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John Hewson

ONLINE SERIES

'Documents on Social Sciences and Humanities'

ROYAL MUSEUM
FOR CENTRAL
AFRICA

Afrika

TERVUREN

Cover: Bram de Rudder (RMCA).

ISBN: 978-9-4922-4429-1

Legal Deposit: D/2016/0254/10

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13, Leuvensesteenweg

3080 Tervuren, Belgium

www.africamuseum.be

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Information about this publication: Publications Service, Royal Museum for Central Africa,
13 Leuvensesteenweg, 3080 Tervuren (Belgium).
publications@africamuseum.be

**TENSE AND ASPECT
IN
NIGER-CONGO**

Derek Nurse, Sarah Rose and John Hewson

(with collaboration from Christa Beaudoin-Lietz)

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Schematic Diagrams

List of Abbreviations

1, 2, 3	First, second, and third person, respectively. Also noun class numbering
A	aspect
A, B, C....	Guthrie's 15 zones: A, B, C, D, E, F, G, H, K, L, M, N, P, R, S. A listing such as A, (B), C means 'attested in all A and C languages but only some B languages'.
ADV	adverb or adverbial
AM	aspect, mood
APP	applicative
ASP	aspect
AUX	auxiliary
BEN	beneficiary
C	consonant
CARP	acronym for the commonest (neutral?) ordering of the four commonest extensions (CAU, APP, REC, PAS). Devised by L. Hyman.
CAU	causative
CFL	counterfactual
CI	class(es) or class marker
CM	clause marker
CND	conditional
CNJ	conjunctive
CON	conditional

CTV	connective
COP	copula
DEF	definite
DEIC	deictic
DIR	directional
DO	direct object
DUR	durative
EMPH	emphatic
ENC	enclitic
EXCL	exclamatory (particle), exclamation
EXT	extension
F	final (includes final vowels, CV suffixes, etc)
FAC	factative
FOC	focus or focus marker
FUT	future
IMM	immediate (future)
HOD	hodiernal (future)
MID	middle (future)
FAR	far (future)
F ₁ , F ₂ , F ₃ , F ₄	degrees of future distance from the present, F ₁ being the closest, F ₄ the Farthest
FP	future prefix
FV	final vowel
GEN-N	genitive followed by a nominal
H	high tone(d) (or zone H, as above)
HAB	habitual
HYP	hypothetical
IMP	imperative
IND	indicative
INCE	inceptive
INCH	inchoative
INF	infinitive
INTRANS	intransitive
INST	instrumental
IO	indirect object
IP	intransitive prefix
IPFV	imperfective
IRR	irrealis
ITR	iterative
ITV	itive
L	low tone(d) (or zone L, as above)
LOC	locative
M	mood
M	mid (tone)
MOD	modal, modality
N	nasal, realised as [m, n, ŋ, ɲ], depending on place of following segment

NAR	narrative
NC	Niger-Congo
NEG	the category negative, or the position in the word, or negation
NF	near future
NP	noun phrase
O/OBJ	object
OM	the pre-stem Object Marker; object marker (affixed)
OP	object pronoun (independent of verb)
OPT	optative
P	plural (1p = first person plural, etc)
P	past (tense)
PART	participle
PAS	passive
PAST	
IMM	immediate (past)
HOD	hodiernal (past)
HES	hesternal (past)
MID	middle (past)
FP	far = remote past
P ₁ , P ₂ , P ₃ , P ₄	degrees of past distance from present, P ₁ being the closest, P ₄ the farthest
PER	persistive
PFM	performative
PFT	perfect
PFV	perfective
POT	potential
Pre-SM or PreSM	the position before SM in the verbal string
PRG	progressive
PRH	prohibitive
PRO	pronoun
PROS	prospective
PRS	present
RCP	reciprocal
REL	relative, pronoun or marker
REM	remote
REP	repetitive
RES	resultative
S	singular (1s = first person singular, 2s, 3s)
S	subject (or zone S, as above)
SBJ	subjunctive
SBS	subsecutive
SC	subject concord (= SM)
SIM	simultaneous
SIT	situative
SM	subject marker (= SC) (affixed)
SP	subject pronoun (independent of verb stem)
STAT	stative

SUF	suffix
SVO	subject verb object
T	tense
TA(M)	tense-aspect(-mood)
TM	tense marker
TRANS	transitive
V	verb
V	vowel
VB	verb, or verbal, or verbal base
VEN	ventive
VOL	volitional
V-NOM	verb plus nominalizer
X	any constituent occurring after the O or V as a sentence constituent, most often referring to adverbials

Other Abbreviations

AAP = Afrikanistische Arbeitspapiere
 ACAL = Annual Conference on African Linguistics
 AL = Africana Linguistica
 AU = Afrika und Übersee
 BLS = Berkeley Linguistics Society
 (B)SOAS = Bulletin of the School of Oriental and African Studies
 CNRS = Centre National de la Recherche Scientifique
 CNWS = Center for non-Western Studies. Leiden
 CUP = Cambridge University Press
 EA = Estudios Africanos
 IAI = International African Institute
 JALL = Journal of African Languages and Linguistics
 JWAL = Journal of West African Linguistics
 LLACAN = (France)
 MRAC = Musée Royal de L'Afrique Centrale
 OGMIOS [Name of the Newsletter for the Foundation of Endangered Languages]
www.ogmios.org/home
 OUP = Oxford University Press
 RKV = Rüdiger Köppe Verlag
 SAL = Studies in African Linguistics
 SCOPIL = Southern California Occasional Papers in Linguistics
 SELAF = Société d'Etudes Linguistiques et Anthropologiques de France
 SIL = Summer Institute of Linguistics (International)
 SOAS = School of Oriental and African Studies
 UCB = University of California at Berkeley
 UCLA = University of California at Los Angeles
 USC = University of Southern California
 WAJL = West African Journal of Linguistics.
 WOCAL = World Conference on African Linguistics

Conventions

=	clitic boundary
-	indicates affixation; morpheme boundary
	space between two items indicates they are separate words
#	word boundary
/.../	underlying or phonemic form
[...]	phonetic form
*	reconstructed or proto form (usually PB)
+	'and' or 'plus'
>	becomes, became
!	(tone) downstep

Introduction

0.1 Purpose

This book is conceived as a sequel to *Tense and Aspect in Bantu* (Nurse 2008). That book concentrated on the typology of tense and aspect (henceforth TA) across a wide and representative set of (Narrow) Bantu languages. It aimed to establish the range within which Bantu languages vary in their grammaticalized expression of TA, how tense and aspect interact, their semantic content, and to some extent their pragmatics. It also examined other verbal categories but in less depth.

Our purpose here is similar. Since we were familiar with verbal categories in Bantu, we were curious about the same categories in wider Niger-Congo and about the general Niger-Congo background from which Bantu had emerged. How far were those categories and that background similar? We discovered many similarities and we also found significant differences. For instance, whereas all Bantu languages encode both aspect and tense, a majority of Niger-Congo families can best be analyzed in terms of aspect alone. Bantu and wider Niger-Congo also differ structurally - whereas what precedes the verb stem in Bantu languages has a synthetic structure, many Niger-Congo languages have a string of discrete items before the stem, so their structures can be viewed as analytic.

Our purpose can be expressed more broadly. We saw that no one had attempted to present an overview of verb systems in Niger-Congo, and we are aiming to fill that gap. Our main focus is aspect (and tense) but we also document word order, verb structure, mood, imperatives, focus, relativization, negation, and auxiliary verbs, particularly 'be' verbs, because they are important sources of aspect in Niger-Congo.

While our main purpose is typology, that is, the system of verbal categories, their architecture and meanings, we also deal with description, diachrony and reconstruction, and change and grammaticalisation.

We present analyses of a set of languages that include a descriptive component because we have found that most of our correspondents and colleagues, Africanist and general, know little of verbs and verb categories in Niger-Congo in general. Niger-Congo is so huge that some concentration is necessary, so scholars are typically familiar with one language or the languages of one family within Niger-Congo but not with the facts of other families. We make a conscious effort to present material in a way that we hope will raise readers' awareness of what is to be found in Niger-Congo.

Our analysis further includes a component on diachrony and reconstruction because of our interest in comparing the facts of Bantu with those of wider Niger-Congo. From asking which systems, categories and structures occur today, we move to asking which might be assumed to be older. Inevitably, this raises the issue of change, because if it is possible to show that certain features are older, then we have to ask what has changed and why. Central to this is grammaticalisation: many of the features we assume are innovations, as verbal inflections or clitics, derived from the incorporation of auxiliary verbs and other independent items.

This book will be of interest to those interested in the theory and practice of verb categories and systems, to Africanists and Niger-Congo specialists, graduate and advanced students, and will be a useful a reference tool for libraries and individuals.

0.2 Niger-Congo, the Niger-Congo languages, the choice of languages

Niger-Congo is a huge language phylum. During the second half of the last century the ‘lumping’ view prevailed, which saw Niger-Congo as a genetic unit, still the mainstream opinion. This Niger-Congo consists of around 1500 languages (Gordon 2005), making it the largest phylum in the world and in Africa¹. Roughly five hundred languages are Bantu, the remaining thousand non-Bantu. Some ‘splitters’ have recently voiced doubts about the membership of some families in Niger-Congo: Güldemann (2008) excises Atlantic, Dogon, Ijoid, and Mande, to which Dimmendaal (2008) adds Ubangi. If all five are excluded, then Niger-Congo loses its status as the world’s largest phylum; if Ubangi is retained, then it remains the largest. Resolving classificatory disputes [of this kind] depends on considering all available linguistic evidence, which we do not do here. Based on verbal evidence, we incline to the mainstream view of Niger-Congo as a unit, and we reproduce below Blench’s most recent (p.c.) diagrams of Niger-Congo (1a) and Benue-Congo (1b) (cf Williamson & Blench (2000:18).

It can be seen from this diagram alone that it is hard to say how many families make up Niger-Congo. Further, the subset at the bottom left of Diagram 1a (and then (1b), Benue-Congo, contains well over 900 languages, divided into various subsets, including eventually Narrow Bantu. What is family, what is sub-family, what is group or subset? This is relevant to our task of dealing with verbal categories in Niger-Congo. Nurse (2008) presented detailed data from a hundred Bantu languages and took data from another hundred or so, out of a total of some five hundred, so could be reasonably certain that the total (some 40%) sample represented a typological and geographical cross section of Bantu. In our case, how many of the one thousand or so non-Bantu Niger-Congo languages would constitute a reasonable typological and geographical sample? Many Niger-Congo languages, spoken by small and often dwindling communities, are not described or are underdescribed. This not only immediately limits our choice but also makes judgements about typicality difficult: if a family or group consists of many languages, of which only one is well described, while the others are not described, how are we to know if that one is typical and could represent the others well? Our solution was necessarily simple and arbitrary. We chose one language from each family as shown in Diagram 1, and then one language from groups within some of the larger ‘families’ such as Adamawa-Ubangi or Benue-Congo. The choice of representative language was made largely on the basis of the availability of a description or analysis, or in some cases more than one description or analysis of the language. In some cases, we were able to communicate electronically with authors. Since it is often, but not always, the languages of larger communities that have been described, we run the risk of presenting the verbal systems of languages that have been simplified by long use as lingua francas. At the same time, since they are used by large numbers of people, there is often considerable current dialect variation (e.g. in Fula), and in that case, which variant are we to describe? We recognize these limitations and we acknowledge that twenty-one languages may be inadequate representation of the thousand or so non-Bantu Niger-Congo languages.

¹ Over 400 million Africans, over half the continent’s population, speak a Niger-Congo language.

Figure 1. Niger-Congo restructured (Data in both figures from Blench)

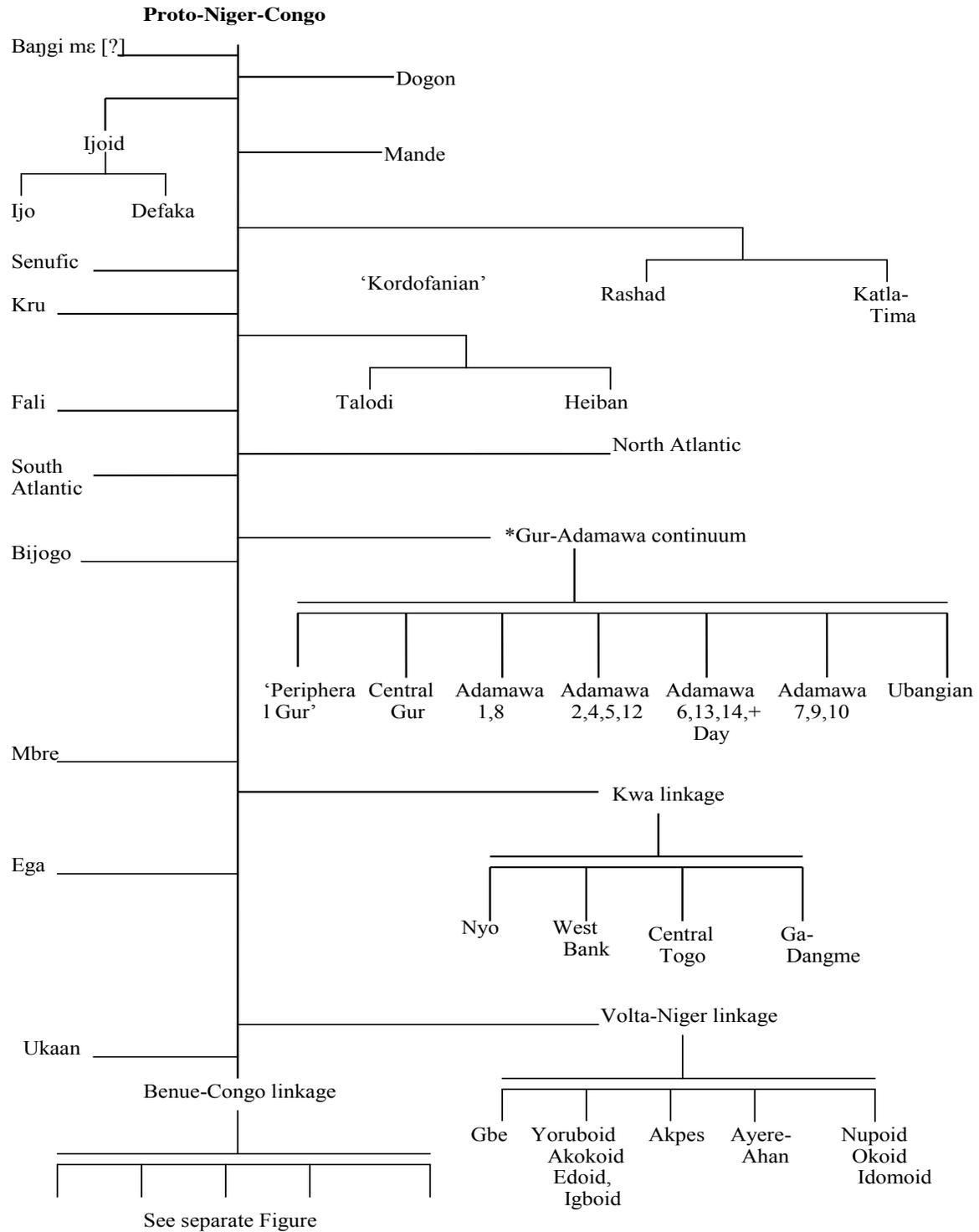
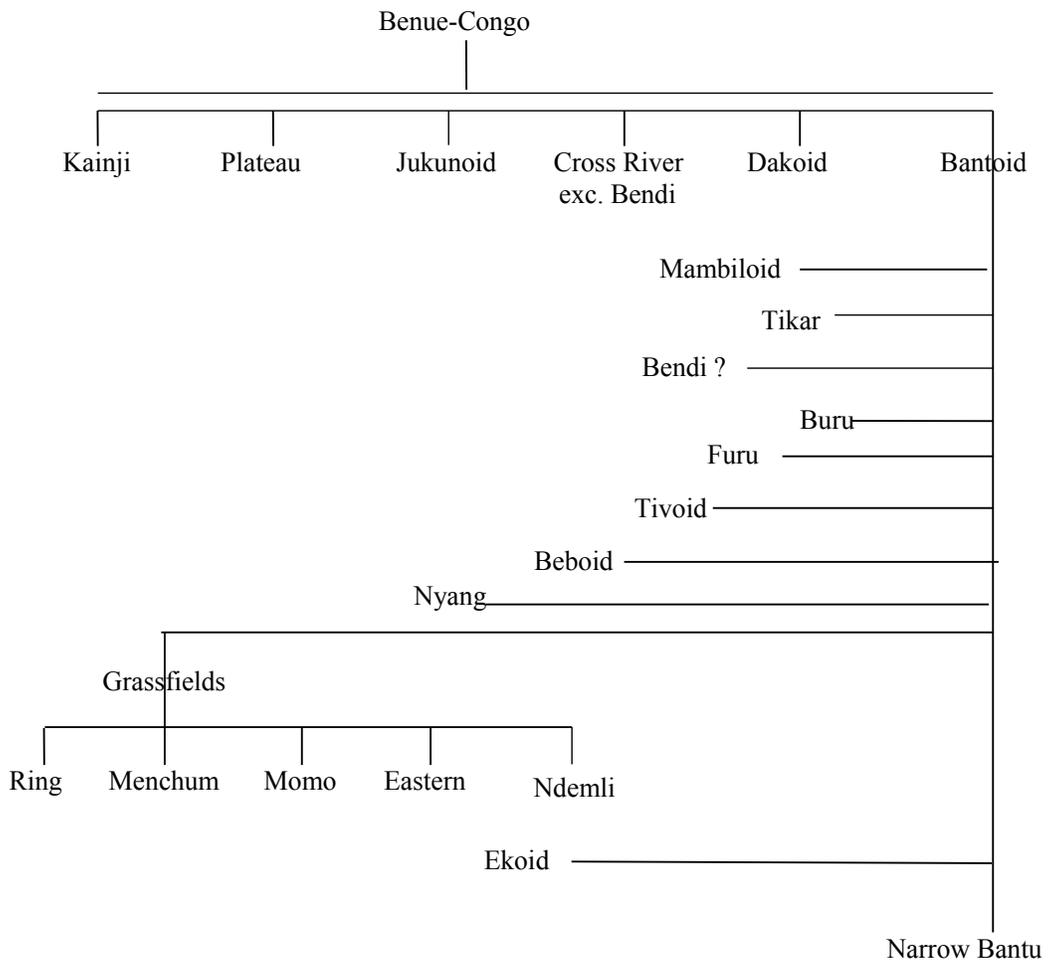


Figure 2. **Revised subclassification of Benue-Congo languages**



0.2.1 Language Sample

Our language sample is, language first, ‘family’ in brackets, followed by the Chapter which discusses each:

Aghem (Grassfields Bantu, Bantoid, Benue-Congo)	Chapter 2
Bambara (Mande)	Chapter 3
Bantu (general overview of Narrow Bantu, Bantoid, Benue-Congo)	Chapter 4
Bijago (formerly part of Atlantic)	Chapter 5
Degema (Edoid, Volta-Niger)	Chapter 6
Donno So (Dogon)	Chapter 7
Doyayo (Adamawa, Gur-Adamawa-Ubangi)	Chapter 8
Ejagham (Ekoid, Bantoid, Benue-Congo)	Chapter 9
Ewe (Kwa)	Chapter 10
Fula (North Atlantic)	Chapter 11
Godie (Kru)	Chapter 12
Ijo (Ijoid)	Chapter 13
Jukun (Benue-Congo)	Chapter 14
Kabiye (Gur, Gur-Adamawa-Ubangi)	Chapter 15
Kisi (South Atlantic)	Chapter 16
Makaa (northwest Narrow Bantu, as Ch 4)	Chapter 17
Obolo ((Lower) Cross River, Benue-Congo)	Chapter 18
Otoro (Heiban, Kordofanian)	Chapter 19
Supyire (Senufic)	Chapter 20
Yoruba (Volta-Niger)	Chapter 21
Zande (Ubangi, Gur-Adamawa-Ubangi))	Chapter 22

0.3 The structure of the book and of the chapters

As mentioned above, there is little broad public knowledge of the details of Niger-Congo languages, either of the verb or any other component. Just because the phylum is so huge, scholars of Niger-Congo have tended to concentrate on one or two languages, one family, or one small part. They know their selected area well but usually have a restricted, passive knowledge of other families in the phylum. Large areas are under-described or not described at all, as can be seen by consulting the World Atlas of Language Features Online. And while descriptions and analyses of better known languages are easily available, those for lesser-known languages are not always easily accessed. So non-Africanists know even less than the specialists.

We attempt to address this problem by devoting one chapter to each of our twenty-one chosen languages. Our goal in each chapter is to present a basic description of facts and data while at the same time demonstrating our aims, methods, and assumptions. Our hope is that readers will be able to read each chapter as a self-standing description of its language. The source materials are quite diverse, being of different length and having different purposes and theoretical frameworks. To make the task of readers easier, we have taken two steps. One is to have a more or less standard format for each of the language chapters: section 1, ‘General’, presents general facts about the community speaking the language, and other bits of information

we deemed relevant or interesting. Unless otherwise stated our source for population size is Gordon 2005; section 2, ‘Word Order’ has a typological statement about basic word order, plus variants, if we were aware of them; section 3, ‘Verb Structure’, shows a verb template and inventory of grammatical morphemes for each position in the template; section 4, ‘Tense and Aspect’, or just ‘Aspect’, sets out the facts and our analysis; section 5, ‘Other categories’, deals with mood, focus, imperatives, and relativization, because we saw that these categories play an important role in the verb. For some languages, coverage of these categories is less than complete, because we could not find details in the source. Section 6 discusses briefly negation, a central verbal feature. Finally, section 7 offers data on auxiliary verbs, especially ‘be’ verbs, because they also play an important role in verbal categories and often illustrate grammaticalization in process. Not every chapter has all of these sections in this detail, but they all attempt to deal with as many of these features as the source allowed.

The second step is that we have taken some liberties with the content of sources. Most were written in the late twentieth century in different conceptual frameworks – generative, functional, “traditional”, descriptive - and they use a range of terminology. We ourselves found it difficult in some cases to unravel it, and so we have presented everything in a more or less unified framework. This makes for easier reading, even though it might upset some of the source authors. We point out where we depart from our sources. We have been in contact with many authors to get their reaction to our procedure and approach. We had hoped to use a more or less unified terminology set out in one chapter but in the end this proved beyond us. While all three authors shared many theoretical assumptions, we disagreed strongly on others, and we could not arrive at a unified approach nor a unified terminology. The chapters by Hewson use one set of terminology (explained in the material after Chapter 22), those by Rose use another set (explained in her Brief Note on Terminology), and those by Nurse use a third set (more or less explained in Chapter 1).

Each chapter concludes with a Bibliography of works consulted for that chapter. Generally used abbreviations appear in the List of Abbreviations. However, because sources for the various languages often use terms and/or abbreviations specific to their language, in such cases we have indicated this at the start of individual chapters.

0.4 Morphosyntactic background

We assume that many readers will not be familiar with the typology of Niger-Congo languages so this section includes an outline of word order, verb structures, and serial verbs. These issues are mentioned in each of the individual chapters.

0.4.1 Word order in Niger-Congo

Verb categories in Niger-Congo are linked to verb morphology, which in turn is linked to the order of sentence constituents, so we start by sketching word order and verb structure. The sketch combines typology and diachrony.

Greenberg’s classic word order typology (1963) distinguished three main orders for sentence constituents, referred to as SVO, SOV, and VSO. Heine (1976) added a fourth, giving the current standard framework for talking about constituent word order in African languages. The three types shared by Greenberg and Heine are labeled A (SVO), C (VSO), and D (SOV) in what follows, and Heine’s additional type is B.

In (1), the abbreviation AUX is a label for a slot, which might contain auxiliary verbs, particles, or adverbials. Since AUX is the label for all the material between S and V (or O), it refers to quite different material in synthetic versus analytic languages. “X” refers to ‘other’ constituents (see Abbreviations).

(1) **Word order in Niger-Congo**

Language (and family)	Basic word order	Other
Aghem (Grassfields Bantu)	S (AUX)V O X	Some Grassfields have SAUXOV (L. Hyman p.c.)
Bambara (Mande)	S (AUX) O V X	
(Narrow) Bantu	S (AUX) V O X	One language has OV (Mous 2005). Many have SOV if O is a pronoun
Bijago (Atlantic)	S (AUX) V O X	SOV when O is 1 or 2 pl pronoun
Degema (Volta-Niger)	S (AUX) V O X	
Dogon	S X O V (AUX)	SVO in e.g. relative clauses
Doyayo (Adamawa)	S (AUX) V O X	SOV with cognate objects. Some Adamawa lgs have basic SOV
Ejagham (Ekoid)	S (AUX) V O X	
Ewe (Kwa)	S AUX V O X	SAUXOV-Nom in PRG/PRS
Fula (N. Atlantic)	S (AUX) V O X	VSO in some subordinate clauses (e.g. relatives)
Godie (Kru)	S V O X	SAUXOV-Nom
Ijo (Ijoid)	S X O V (AUX)	
Jukun (Benue-Congo)	S V O X	SAUXOV-Nom
Kabiye Gur)	S V O X	SAUXV-Nom O
Kisi (S. Atlantic)	S V O X	SAUXOV (does V = V-Nom?)
Makaa (Narrow Bantu)	S V O X	
Obolo (Cross River)	S V O X	
Otoro	S V O X	Other Kordofanian lgs have other orders (SOVAUX, even VSO)
Supyire (Senufic)	S AUX O V X	
Yoruba (Volta-Niger)	S AUX V O X	Also SAUXXVO ?
Zande (Ubangi)	S V O X	VSO in some subordinate clauses

Type A languages have a basic S V O X order, and prepositions². Within the noun phrase there is some variation, most languages having all nominal modifiers after the head noun, but a minority having the adjectival modifier before, with all other nominal modifiers after, the head noun³. This is the commonest order worldwide, in Africa (Heine 1976, “71%”), and in our Niger-Congo sample (13 of 21).

²“Basic” refers to word order where S and O are nominals (in some languages they may also be pronominals). Type A languages may or may not have an AUX before V, thus S AUX VO X.

³As Creissels (2000:253) points out, word order in the noun phrase tends to harmonize with clause constituent order: in VO languages, as the verb comes before its complements, so the noun precedes its modifiers, while in OV languages, verb follows complement and noun follows its modifiers.

As Type A, Type C languages have prepositions and nominal modifiers following the noun but differ from A in having the verb before the S, thus V S O X. Type C is uncommon worldwide and in Africa (Heine 1976, 5%), and largely irrelevant to Niger-Congo, reported as occurring as the basic constituent order only in a few Kordofanian languages not part of our sample, and occurring in a few languages in our sample only as the word order in some subordinate clauses (e.g., Fula, Zande). Its presence in some Kordofanian languages likely results from contact⁴.

All Type D languages have SOV and postpositions but there are two subtypes: in one type all nominal modifiers precede the head noun, whereas the other has nominal modifiers after the head noun. For Creissels (2000:252) “true” SOV languages have the AUX following the V. So in our sample only Ijo and Dogon would be “true” SOV languages, while Bambara and Supyire would not be, because they have AUX before the V⁵. Type D languages are not widespread in Africa and where they do occur they usually alternate with one of the other orders, most often SVO, in some functions.

Type B languages may have SVOX or SOVX or both. What they have in common is postpositions, and genitival modifiers before the head noun but all other nominal modifiers following the head noun. Since Type B languages are rare outside Africa but fairly widespread in Africa, especially West and Central Africa (see Güldemann 2008:159-63⁶), this requires an explanation. The current most widely accepted solution is that of Heine & Claudi (2001:43), who proposed that the co-occurrence of the SVO order with GEN-N order in the noun phrase is responsible for the emergence of the S AUX O V order via a nominalization process, described thus by Creissels (2000:241):

..in such languages (having SVO, and genitive modifiers before the head noun), noun phrases corresponding to the object of finite verb forms precede nominalised verb forms, since they are treated as their genitival modifier; consequently, with complex verb forms consisting of an auxiliary verb and a nominalised form of the main verb, the noun phrase corresponding to the object of a finite verb form precedes the nominalised form of the main verb. Subsequently, the decategorialisation of the auxiliary verb leads to the reanalysis of such constructions as involving a finite verb form preceded by a noun phrase in object function.

So in this scenario, SVO with GEN-N leads to S AUX OV-Nom and ultimately to SOV when the auxiliary is decategorised. In our sample, beside a majority (13) with SVO, a minority (4) has both SVO and S AUX OV⁷, and as we have just seen, another minority (4) has only SOV today. Creissels (2000:241) also says: “The presence of TAM markers between S and O in clauses with the constituent order SOVX can be viewed as a strong hint that such a process of reanalysis took place in the history of the language in question”. Today some Grassfields languages (Bambara (Mande), Ewe (Kwa), Godie (Kru), Jukun (Benue-Congo), Kisi (S.

⁴There is more typological variation within Kordofanian than any other NC family.

⁵Watters (2000:199) says S AUX OV is “more common” in Africa than S O V AUX.

⁶The co-existence of S V O and S O V cuts across genetic boundaries in Africa, occurring not just in Niger-Congo but also in members of the three other phyla, Afro-Asiatic, Nilo-Saharan, and Khoisan.

⁷This may be an understatement because not all our groups behave unanimously. Thus Aghem, our Grassfields Bantu representative, has S V O, but other Grassfields languages have S V O and S AUX OV (Larry Hyman, p.c.).

Atlantic), Supyire (Senufo), and, according to Güldemann (2008:261) some Adamawa-Ubangi languages) have OV with auxiliaries and/or TAM markers before the O.

If this scenario is correct, when did SOV emerge from SVO? The weight of recent publications⁸ is on Proto-Niger-Congo (and Proto-Bantu) having S AUX O V beside basic SVO. That Proto-Niger-Congo had an analytic structure in which a string of discrete items, including auxiliaries (AUX), preceded the V is not in dispute, so S AUX V O. While it is possible that S AUX O V might have developed out of this already at the proto-stage, it seems likely that the conditions that gave rise to the nominalization continued to exist long after the proto-language. If they continued to exist, then later grammaticalizations of the same kind could have continued to arise during the later development of Niger-Congo. Indeed several of the languages examined still have a nominalised V, which suggests development from a more recent grammaticalization, rather than one that characterized the proto-languages ten millennia ago. The details need further analysis.

Basic word order can be modified by any of several factors: (i) One is topicalization or focalization, which moves the highlighted constituent out of its regular position; (ii) A word order other than the basic one often occurs in subordinate clauses, especially relative clauses: or where the object is a pronoun, not a noun; (iii) In some languages, one order is associated with certain aspects/tenses, while another co-occurs with other aspects/tenses, which might be linked to the chronology of the grammaticalisation involved; (iv) Finally, while word order is clearly linked to genetic inheritance and to these internal factors, it can also be modified by areal diffusion. The greatest variation is in Kordofanian, which has stood at the crossroads between representatives of the different phyla for millennia, while in West and Central Africa, the S AUX O V order of Type B occurs in Niger-Congo, Nilo-Saharan, and Afro-Asiatic languages.

0.4.2 The structure(s) of verbs in Niger-Congo

As can be seen in (2), many Niger-Congo families (11 of 21) have a nuclear stem, consisting of Root – Extension (EXT) - Final Vowel (FV), in which EXT and FV are affixes. The stem or what remains of it is bracketed in (2). EXT includes morphemes for valency-changing categories such as causative, applicative, neuter, reciprocal, reversive, and passive⁹. FV was originally used for a binary aspect contrast between perfective/factative and imperfective, both indicated by a single vowel. Although various groups now use this position to indicate other categories, such as subjunctive, it is not clear from the NC evidence that it was originally so used. We can assume this affixal stem structure goes back to Proto-Niger-Congo (Nurse 2007), because it is very unlikely that so many geographically distant families would have innovated it independently.

Eleven of twenty one families have an EXT, though the size of the set at EXT varies from language to language. While most members of most sets are shared, suggesting they are old and inherited, some are apparently innovations. Six (Bambara, Ewe, Ijo, Jukun, Obolo, Yoruba) have no trace of an EXT, although Williamson & Blench (2000:30,33) say of Ewe and Obolo that other languages in their families do have EXTs. Three families (Grassfields, Ekoid, Senufic) have rolled traces of the EXT into a single post-radical portmanteau position, labeled Suffix in (2).

⁸Gensler (1994, 1997), Gensler & Güldemann (2003), Güldemann (2008:159-62), Creissels et al (2008:127).

⁹Although Welmers (1973) says only Bantu shows a clear passive within Niger-Congo our survey showed other groups with a passive, though not of the Bantu shape.

Eleven of twenty one have the discrete FV slot. Four (Aghem, Kisi, Obolo, Yoruba) have no trace of the FV while six (Bambara, Ejagham, Ewe, Ijo, Jukun, Supyire) have a Suffix, which rolls together some former EXT morphemes and some from FV¹⁰.

(2) **Verb structures in Niger-Congo** (Nurse 2007)¹¹

Language	Verb structure
Aghem	HYP SP CFL NEG T-FOC SBJ [root - suffix] HAB NEG FOC
Bambara	SP AUX (includes A, NEG, T) CAUS – [root - suffix]
Bantu	PreSM – SM – NEG – TAM – OM – [root - EXT - FV] - IMP Pl
Bijago	NEG – FOC – SM – A – “AM” – OM – [root - EXT - FV] - REL
Degema	(1) SM – [root - EXT = FV] – IMP NEG (2) SM – [root = A] SM - root
Dogon	(1) [root – EXT – FV] – NEG – TAM – SM (2) [root – TAM] [AUX – NEG – TAM – SM]
Doyayo	SP AUX [root - EXT - FV]
Ejagham	SM – NEG/A – REP – [root - suffix]
Ewe	SP = NEG = M ₁ = A DIR ₁ M ₂ M ₃ DIR ₂ “be’ [root – suffix] = OP NEG
Fula	NEG SP - AUX - [root – EXT – FV] – NEG – no – IOM – DOM – LOC/INST
Godie	SP – a [root – EXT – OM – FV]
Ijo	SP OP – [root – EXT – suffix ₁ – suffix ₂] AUX
Jukun	SM – NEG – AM – [root – suffix]
Kabiye	SM – NEG – A – [root – EXT – FV] – OP
Kisi	SP [root – EXT]
Makaa	SP T H ₁ P1 NEG=CM HAB PRG ADV AUX OM – [root – EXT – FV – H ₂]
Obolo	M – SM – NEG – AM – [root]
Otoro	na – HAB – SM – TA – [root – EXT – FV] – OP – IMP
Supyire	SP NEG AUX OP IP – FP – [root – suffix]
Yoruba	SP AUX [root]
Zande	SM (or SP?) – TAM – [root – EXT – FV] – OP – NEG

The original nuclear structure Root – EXT - Final Vowel has been lost in languages in a large area of West Africa: northwestern Bantu, Grassfields Bantu, many Bantoid languages, and languages farther west, such as Yoruba. Eight families have only a Suffix, which incorporates remnants of EXT and FV, besides some new material, while two (Yoruba, Obolo) have nothing after the root.

Several processes seem to be involved in this loss. First, the derivational extensions at EXT could no longer be expressed because the prosodic stem became limited to four, three, and then two syllables (Hyman 2004), affecting material at the right of the stem. Then, although segmental material was deleted, associated tones were not, leading to the appearance of floating tones, often associated with the expression of aspectual categories, and to an expanded role for

¹⁰FV and Suffix differ in this text: FV follows EXT, but Suffix is EXT and FV rolled together.

¹¹Items separated by a space are discrete: the equals sign represents cliticisation, where known, and the hyphen indicates affixation. Abbreviations are listed in the Abbreviation and Conventions section.

tones in general. If a language loses the segmental expression of derivational and aspectual categories, in principle it faces a choice: it can also lose the categories, or it can express them some other way. In practice, that seems to be hardly a choice as all the languages looked at that have lost extensions and/or final vowels, keep the categories and express them some other way. Typically, for example, the functions of the applicative extension (“to, from, for”) are replaced by the use of word order, or prepositions, while the causative is expressed by use of some auxiliary, “to make/cause to verb”, as can be seen illustrated in the first Ejagham example in (3a). The expanded role of tones can be seen examples (3b-e), which differ only tonally. Care is necessary here, as it is not clear whether the surface tones in these examples reflect floating tones, or tonal patterns associated with individual aspects and moods (and elsewhere, tenses), or come from prefixes or the stem itself.

(3) **Examples of replacement of EXTs and FVs, in Ejagham** (Watters 1981)

- | | | | | | |
|---|-----|---------------------|---|-----------------|-------------------------------|
| a | CAU | a-Ø-yím | ɛ́tá | a-Ø-gbɔ́ | (verb -yim ‘make, do’) |
| | | 3s-Ø-make | Eta | 3s-Ø-fall | |
| | | ‘He made Eta fall.’ | | | |
| b | PFT | a-Ø-fag | ‘They have swept’ (verb fag ‘sweep’) | | |
| c | FAC | a-Ø-fâg | ‘They swept’ | | |
| d | CON | á¹-Ø-fág | ‘If they sweep’ | | |
| e | SBJ | á-Ø-fág | ‘They should sweep’ | | |

While most Niger-Congo languages share the verb nucleus root - extension - final vowel, just outlined, they vary considerably in what precedes it. Current Niger-Congo languages range along a continuum between “analytic” and “synthetic” languages. In fully analytic languages what precedes the nucleus is a string of discrete pre-stem material (particles, auxiliaries, adverbials), indicating categories such as subject agreement, tense, aspect, mood, negation, focus, relativization, and often other categories such as conditional and object marking. Sometimes this pre-stem material is a long string, as implied in Ewe and Makaa templates in (2): sometimes the string contains serial verbs, often bare stems where most categories are only marked on one verb in the string, usually the first: sometimes an auxiliary (AUX in (2)) is followed by an infinitival main verb: sometimes the AUX is a form of ‘be, or ‘locative be’, and the main verb is nominalized or locativized. Fully synthetic languages have fused all the pre-stem material, and so the nucleus is preceded by a set of inflectional prefixes. Between the ends of the continuum are many languages which have fused some morphemes while keeping others discrete.

Judgements about which families have a synthetic, and which an analytic structure are obscured in some cases by differences in how to interpret the data morphologically, but it appears that eight languages (Aghem, Bambara, Doyayo, Ewe, Kisi, Makaa, Supyire, Yoruba) are fully analytic, nine are synthetic (Narrow Bantu excluding the northwest, Bijago, Ejagham, Fula, Jukun, Kabiye, Obolo, Otoro, Zande), and three show some synthesis (Degema, Godie, Ijo). Dogon is excluded because all its inflection is post-stem.

There is a clear assumption that the analytic structure was original and that the grammaticalized structures developed from the analytic by cliticization and fusion. Of those Niger-Congo languages/families that have evolved a fully synthetic verb structure, some are adjacent or near Bantu: Ejagham (Ekoid, SE Nigeria/SW Cameroon), Jukun (Jukunoid, SE Nigeria), Obolo (Cross River, SE Nigeria), Zande (Ubangi, northern Democratic Republic of the Congo). Others are distant from Bantu: Bijago (Guinea Bissau), Fula (Senegal to Sudan), Kabiye (Togo), Otoro (southern Sudan). In the latter languages/families, synthetic structures resulting from grammaticalization are likely to have developed independently, whereas the emergence of synthetic structures in the families adjacent to Bantu suggests that they may be related to what happened in Bantu.

0.4.3 *Serial verbs*

While ‘serial verbs’ do occur outside Africa (Heine & Leyew 2008:22), they are particularly common in Africa, and especially in Niger-Congo (Heine & Leyew (ibid), Dimmendaal 2008:298)¹². We have noted them for only eight languages but are aware that if we had searched more diligently, the number would have been larger as they are particularly common in parts of West Africa. Serial verbs can be defined loosely (“constructions in which two or more verbal lexemes combine without any overt indication of a dependency between them: none of the verbs is morphologically marked as dependent...no conjunction between them”) or more narrowly (“constructions that involve two or more verbs but that, taken as a whole, have the behaviour of a single predicate, and not that of a construction involving distinct predicates in some dependency relation”) (both from Creissels et al 2008:112).

- (4) Yoruba¹³ **ojó ra iwé fún iyá**
 Ojo buy book give mother
 ‘Ojo bought a book for mother.’

¹² They occur outside Niger-Congo, for instance in Khoisan (Güldemann & Vossen (2000:109)).

¹³ Example from Creissels et al (2008:113).

1

Aspect and tense

1.1 Aspect

1.1.1 *Perfective, Perfect, Factative*

While a minority of Niger-Congo families have tense contrasts, all have aspect. Five aspects are widespread in Niger-Congo: Factative (FAC)/ Perfective (PFV), Imperfective (IPFV), Perfect (PFT), Progressive (PRG), and Habitual (HAB)/Iterative. Others are less widespread and not dealt with here in any detail: Inceptive, Situative, etc. Since parts of this statement might not seem self-evident to some readers, it needs explanation.

Perfective denotes a “complete situation” and “often indicates the completion of a situation when contrasted with an imperfective situation” (Comrie 1976:18,19). There is an obvious close connection between perfectives and past situations, because it is past situations that are most often complete. In many languages perfectives can also represent non-past situations.

Perfect¹ denotes “a situation that started in the past but continues into the present” or “the continuing present relevance of a previous situation” (Comrie 1976:52, also Bybee et al (1994:54,57,318). It focuses on the result phase, immediately subsequent to the situation. Examples: Bajuni (Swahili dialect) **i-ndo-vunda** ‘It is rotten.’ (-**vunda** is a stative² verb), but **Masudi ndo-andoka** ‘Masudi has gone out.’ (-**andoka** is a dynamic verb).

Factative³ is not likely to be familiar to many readers outside West African linguistic circles. Attention was first drawn to it by Welmers (1973:346), whose formulation has been repeated since in slightly modified form by others (e.g. Faraclas 1984, 2007, Faraclas et al 2007). In this formulation, Factative has two characteristic features. Structurally, it is nearly always an unmarked form, either a zero form or the least marked aspectual form in a language. In particular, in contrast with Imperfective, it will generally be the unmarked form. Functionally, when used with non-stative or dynamic verbs, it typically represents past, complete, situations, but when used with stative verbs, it represents current, non-past, incomplete, states, that is, presents or futures. Welmers (ibid) says: “(Factative) expresses the most obvious fact about the verb in question, which in the case of active verbs is that the action took place, but for stative verbs is that the situation obtains at present”.

Although that characterization fits many cases of Factative in the sample languages, it does not fit all. Structurally, some languages (e.g. Bambara, Bijago, Degema) have added new suffixes at FV to mark Factative, while others (e.g. Ejagham, Godie) mark the contrast between FAC and IPFV only by tones, so it is hard to tell which is the unmarked form. Functionally, while Factative representing past situations with dynamic verbs and present situations with statives is the normal situation with most of the sample languages, it has expanded its role in some language. Thus⁴:

¹ Also called Retrospective or Anterior.

² See Comrie (1976:48) for ‘state’ versus ‘dynamic situation’.

³ Also called Aorist or Performative.

⁴These are not the only examples. Childs (1998:314, fn 121) that the “Perfective” (our Factative) can be used of the imminent future, and in Makaa the Factative can translate as ‘be about to verb’.

(1) **Expanded role for Factatives in some languages**

a	Doyayo	mi³ kpe⁴l-ɔ⁴ mi¹ kpe⁴l-ɔ⁴	‘I pour’ or ‘I poured’ ‘I will pour’ (remote future)
b	Ejagham	a-gbɔ̃ tíg a-gbɔ̃	‘3s fell’ (past) ‘3s will fall’ (future)
c	Obolo	’n-ge íkpá	‘I write a letter’ or ‘I wrote a letter’
d	Otoro	liji li-rit-ɔ liji li-rit-ɔ likarage ɲi gwu-dir-ɔ	‘People dance’ ‘People danced yesterday’ ‘I sleep’ or ‘I slept’
e	Yoruba	mo-o	‘I go’, ‘I went’, ‘I will go’
f	Zande	mi-kpár-á mi-ní-kpár-á mi-a-ná-kpár-á	‘I divided (the meat)’ ‘I always divide’ ‘I will divide ... right away’

All the forms in (1) are Factatives. In some (Doyayo, Obolo, Otoro) the Factative can represent past or present with any verb, and in Yoruba it can even represent the future. Time is clarified by the context or by use of a time adverbial. Change of tone makes the Doyayo Factative into a future: addition of a time adverbial has the same effect in Ejagham: and use of prefixes produces various functional effects in Zande.

John Hewson has examined the analysis of Akan by Boadi (2008), who deals with the functions of a form he calls Habitual. These include several factative-like functions but also others which are reminiscent of performatives (“I bet you X”), leading Hewson to conclude that Performative would be a better label than Factative, because the functions of such forms are wider than those outlined for Factative by Welmers. Because this chapter focuses on African languages, it retains Factative, but Hewson discusses Performative further at the end of this manuscript⁵.

It ought to be clear from what has been said so far about Perfective, Perfect, and Factative that they share areas of overlap so the differences and similarities need to be made clear. Perfective and Perfect both represent complete situations but whereas Perfectives show no particular connection to the present (‘He lived in Lagos for twenty years’, the implication being that he doesn’t now), Perfect representations do show such a connection (‘He has lived in Lagos for twenty years’, the implication being that he still does). Perfects and Factatives are superficially quite similar to each other, especially in their both distinguishing dynamic from stative verbs. They differ structurally, in that Factatives are typically unmarked, whereas Perfect marking tend to derive from grammaticalizing auxiliary verbs such as ‘finish’ or by modifying Perfectives in some way. They differ functionally in their attention to the result phase, which is

⁵ Performative is discussed at some length in Hewson & Bubenik (1997:10-18).

central to Perfects but not important to Factatives. Finally, Perfectives and Factatives differ most obviously in their treatment of stative verbs: Perfectives have the same morphology for both and the same, complete, meaning for both kinds of verb, where Factatives have the same morphology for both but have different meanings.

One characteristic feature follows from this discussion of Factative, Perfective, and Perfect. Together they make for a crowded semantic and functional space and it is in fact exceptional that all three co-occur⁶. It is especially unusual for Perfective and Factative to occur together, while the co-occurrence of Perfect and Factative is quite common in Niger-Congo (see (2)), as is Perfective and Perfect elsewhere.

1.1.2 Incompletives

Standing in contrast to Factatives and Perfectives is a set of incomplete categories: Imperfective, Progressive, Habitual/Iterative, (and others).

The term ‘Imperfective’ occurs with two meanings in the sample languages. In some languages it is a superordinate, being the only incomplete category to contrast with Factative (or Perfective). This can be seen in (2) in Bambara and Degema. In other languages it is one of several incomplete categories, co-ordinate with Progressive, Habitual, Iterative, and others.

In both usages, Imperfective is a wide incomplete, seeing a situation from the inside: the situation has started, the speaker knows not when or it is unimportant, it is ongoing, and will likely continue. Progressive is a more focused type of imperfective, which narrows attention to the temporal space around the time of reference or speaking. As such, it is incompatible with stative verbs, whose emphasis is on more permanent state (*I am knowing). The class of stative verbs has a fairly common core across languages but has some intralinguistic variation.

Habitual represents a ‘situation...characteristic of an extended period of time, so extended that ..the situation..is viewed,..as a characteristic feature of a whole period’ (Comrie 1976: 27). An Iterative represents a situation that is repeated, an incomplete series of complete events. While the distinction between Habitual and Iterative is easy enough to grasp objectively, in practice it is not so clear. Some sources describe as Iterative situations what others label Habitual. The examples provided in the sources do not always clarify the situation, being often just one-word translations. So while (2) uses the two labels in some cases, generally following the source, this section often refers to them as Habitual/Iterative, thus admitting ignorance.

1.1.3 Factative versus Imperfective, the final vowel (FV)

A fundamental binary aspectual distinction is often made between Perfective and Imperfective (e.g. see Comrie 1976:25). However, most Niger-Congo families distinguish rather Factative and Imperfective, with Imperfective being used in its widest, incomplete sense. As (2) shows, all but four of the sample languages/families have Factative, not Perfective. Even the four are doubtful: we simply do not have access to enough diagnostic data to be sure about Aghem, Dogon, and Supyire, and although many Bantu languages have a Perfective, we are not sure how many others, in the northwest and perhaps elsewhere, have a Factative instead. We have made the conservative default judgement that a lack of hard evidence indicates Perfective, not Factative, but had we made Factative the default case, then probably 20 out of 21 would have

⁶ Gikuyu (Hewson & Nurse 2005) is one apparent exception, and Hewson (p.c) feels that Boadi’s (2008) treatment of Akan aspect can be interpreted as showing all three co-occurring.

shown a Factative, not a Perfective. Factative is more widespread in non-Bantu Niger-Congo than many have hitherto assumed, as it stretches from Kordofanian and Ubangi, in the east, to Atlantic in the far west. (2) is intended to give a general outline of the distribution of aspects in the sample languages. It shows which aspects occur, how they are encoded, whether by suffix, the use of auxiliary, or in other ways, and it also shows general details of marked versus unmarked.

(2) **Aspectual contrasts in Niger-Congo**

Language (family)	Aspects and marking
Aghem (Grassfields)	Unmarked PFV versus IPFV (*- ag). Also HAB (IPFV post-verbal tsigha (< ‘pass’). Possibly others. Other Grassfields have a whole FAC category but Aghem seems to have just the single form.
Bambara (Mande)	FAC (AUX yé with trans, -ra with intrans) versus IPFV (AUX bé) and a shifter tun). Yé and bé both forms of ‘be’.
(Narrow) Bantu	Most Bantu lgs have unmarked PFV, IPFV (- a(n)g-a), PFT (- ile), HAB (as IPFV), PER (- ki- , also SIT), PRG (be + loc) are the most frequent aspects. FV -i and vowel harmony also occur (near past, perfect).
Bijago (Atlantic)	FAC (FV -e , or post-SM vowel copy of stem vowel, so “unmarked”) versus IPFV (-i either at FV or post-SM). Also PFT (prefixal or FV), and prefixal <i>passé neutre</i> , virtual, <i>enfin</i> , PER, etc.
Degema (Volta-Niger)	Unmarked FAC versus PFV -Vn . Also PFT (- te/-de).
Dogon	PFV (-i) versus IPFV/PRG (-ze) versus PFT (-aa) versus HAB (as IPFV but different tone versus ITR (reduplication). PFV = FAC?
Doyayo (Adamawa)	FAC (-ɔ) versus IPFV (-kɔ). IPFV does not occur alone but with other morphemes at AUX (gɔ HAB/POT; da Remote; za Undesirable; gi PRG; nɛ Past/Prior), etc.
Ejagham (Ekoid Bantu)	FAC (structurally zero, but tone) versus IPFV/HAB (-ag) versus PRG (-ki-) versus PFT (as FAC but tonally different) versus REP = PER.
Ewe (Kwa)	Unmarked FAC versus IPFV/HAB (-na). Also ITR (AUX ga), PRG (AUX ‘be’ and suffixal -m), PROS (AUX ‘be’ and suffixal -gé), POT (AUX la). Some of these may be moods not aspects.
Fula (N. Atlantic)	Fula is morphologically complex, dialectally divided, so its verbal categories are not completely transparent: FAC/PFV (-ii) versus PRG (AUX ɗɒn or e plus main verb with -a) versus FUT/HAB (suffix of several shapes). Also a shifter (-no) and a ‘vague future’ (-ma).
Godie (Kru)	Unmarked FAC (low tone) versus IPFV as FAC but mid tone) versus PFT (-a) versus PRG (‘be at’). ? Also PFT (AUX yV) ? Are the two PFTs two past tenses?
Ijo (Ijoid)	FAC (-mɪ), versus IPFV (two allomorphs, tími (AUX) refers to PFV

	events, and -yémi , refers only to IPFV situations), HAB (IPFV + reduplication), PFT (-dó ɔ), FUT (-ɲí(mɪ)). Note distinction AUX versus Suffix. ?"Present (Stative"?) (-(wó)nimí), "Remote Past/Past State"?) ((wǎrí-mí))
Jukun (Benue-Congo)	Unmarked FAC versus IPFV (-ri-). Also PTF (-n ri-), HAB -nem-tí- , PFV-HAB (-nəm-Ø-).
Kabiye (Gur)	FAC (-á) versus IPFV (-ki-/Vgh) versus "Aorist". What IS the aorist? = SBJ? PRG and HAB expressed by AUXs plus main verb.
Kisi (S. Atlantic)	FAC (-u , LH) versus PRG (AUX co plus lengthened FV) versus HAB (as FAC but LL). PFT is FAC plus adverbial niŋ .
Makaa (NW Narrow Bantu)	Unmarked FAC versus HAB (AUX do) versus PRG (AUX (ngə) versus PFT (AUX mə).
Obolo (Cross River)	Unmarked FAC versus IPFV (-kí-). Also ?PRG (-gâ(-kî)- or -mê-(kî)-), ?Subordinate (-ke-bí-), ?PFT (-ba- or -ri- , optionally followed by -bé- or -ré- , followed by infinitival í-), HAB -ké-kí- .
Otoro (Kordofanian)	FAC (-u/-ɔ) versus IPFV/VENTIVE (-a/-o) versus ? SBJ (-i/-ǝ). Also HAB (-atí- and IPFV), PROS (-a- and IPFV), PFT (-ma- and IPFV), PRG ('be' + FAC main verb).
Supyire (Senufic)	Unmarked PFV/FAC versus IPFV (-li , -ni , -re , -ge). Also HAB (AUX maha), PFT AUX a), PER (AUX sáhá), POT (AUX kú), all with PFV, and HAB (AUX maha) and PRG AUX na), both with IPFV.
Yoruba (Volta-Niger)	Unmarked FAC versus PRG (high-toned [n] versus PFT (ti). Also INC/PER (IPFV plus máa) and FUT (yó or á).
Zande (Ubangi)	Unmarked IPFV(?) versus FAC (vowel copy suffix). These combine with several prefixes indicating tense, aspect (HAB), mood, and clausal status of the verb.

Certain features stand out from the tabular presentation in (2). Most pervasive is the contrast between Factative/Perfective and Imperfective, which occurs in nearly all the sample languages⁷. While it would not be accurate to say that the Factative is unmarked in every case, it is in many, and it would be accurate to say that if one of the two is unmarked, it is usually the Factative⁸. It is also true that the marking of the contrast has much to do with the FV, a point taken up below. Following Factative and Imperfective, the commonest aspects are Perfect, Habitual/Iterative, and Progressive, in that order, all three occurring in at least half of the families. Perfect is not linked to any obvious single morphological pattern. Progressives are often linked to 'be' and a locative ('in, at') or nominaliser. Habitual/Iteratives are partly expressed by reduplication but more obviously by being connected to the Imperfective: Imperfective subsumes Habitual, or Habitual is based on the Imperfective plus another feature, or is the Imperfective

⁷The only languages not clearly to have this are Kisi and Makaa, which contrast Perfective, not with a single incomplete but with Habitual and Progressive. Details of these were scant so we were loath to recategorise either as general Imperfective.

⁸ Some languages distinguish Factative and Imperfective only tonally. In such cases it is hard to distinguish marked and unmarked.

form of an auxiliary plus a main verb. Habituals are more obviously similar, functionally and morphologically, to Imperfective than are Progressives.

Finally, the range of categories and morphology occurring at FV is fairly limited, whereas that in the pre-verb position is massive, reflecting the analytic nature of the verb and the variation that occurs between verb and subject. Since Factative and Imperfective are mostly expressed at FV, with the other aspects (and tenses) mostly in the large pre-verb position, that reinforces the impression that Factative and Imperfective are more fundamental and ancient than the others, which are built around them. This should not be interpreted to mean that at an earlier point only Factative and Imperfective existed – nearly all families show evidence that some of these other categories and their morphology, while quite disparate from family to family, are long standing.

General mention has been made of the verb nucleus root - extension - final vowel (FV), being of considerable antiquity in Niger-Congo, and of the FV suffix as the carrier of aspect in that nucleus. Just over half of the families surveyed still have the discrete FV slot. A few families no longer have any trace of the FV, apparently because they have shortened the verb stem, and one of the first victims was the final vowel. Others have a portmanteau Suffix, which rolls together some former EXT morphemes and some from FV. Yet others have innovated morphemes at FV, suggesting that FV was not a closed set – because of its final position, it attracted and grammaticalized adjacent material, such as auxiliaries, adverbials, or particles.

(3) Factative/Perfective versus Imperfective alternations at FV

Language	Verb structure
Aghem	No traces of inherited FV alternation occur because “no final theme vowels occur in Grassfields” (Watters 2003:245). The /-a/ is from /-ag/.
Bandi, not Bambara (Mande)	Although no traces of inherited FV alternation founding Bambara, they occur in other Mande languages, e.g. Bandi: i ha-i ‘He died (FAC), i ha-a ‘He is dead’ (“stative”)
Bantu (Lokele C55)	to-Ø-kol-i ‘We did’ (PFV), to-Ø-kol-a ‘We always do, will do’, to-kol-ek-e SBJ
Bijago	ibooti i-tont-ε ‘Dogs jumped’ (FAC), ibooti i-tont-i ‘Dogs are jumping’ (IPFV)
Degema	No traces of inherited FV alternation found, though there are new morphemes in verb-final position.
Dogon	gεεnde-m ‘I ‘ll look’, gεnd-i-m ‘I looked’, gεnd-aa-zε-m ‘I have looked’. FV in the first example is the lexical vowel, in the second the PFV (FAC?), in the third the PFT ⁹ .
Doyayo	FAC kpel-ɔ ‘He poured’, toot-ɔ ‘He grew = is big’. The IPFV is an apparently innovated suffix -kɔ.
Ejaghām	No traces of inherited FV alternation found, though there is an FAC Focus form with -f/-ε , status and origin unclear. Tonal alternations may point to lost FV.

⁹ Old FVs in Dogon are now followed by suffixal morphemes for aspect, negation, and subject. This contrasts with the morphological structure of the verb elsewhere in Niger-Congo. Ijo has auxiliaries suffixed to the verb as aspect markers.

Ewe	No traces of inherited FV alternation found, though there are new morphemes in verb-final position.
Fula	o war-ii ‘He came’ (FAC), o-don-war-a ‘He is coming’ (IPFV). Fula has many other vowels at FV, in various roles.
Godie	Godié distinguishes FAC (low) from IPFV (mid) tonally. Marchese says Proto-Kru also distinguished FAC (unmarked) and IPFV (front vowel suffix with vowel harmony) segmentally, as do some Kru varieties today. Godie also has -a PFT.
Ijo	No traces of inherited FV alternation found, though new morphemes occur in verb-final position.
Jukun	Only -e/-ɛ occurs, with tonal variation (NEG, IMP, SBJ)
Kabiye	While in Kabiye only FAC -á was found, other Gur languages show the inherited FV alternations, e.g. Ditammari: o twɔk-á ‘Il est arrivé’ (FAC), o twɔk-u ‘Il arrive’ (IPFV)
Kisi	No traces of inherited FV alternation occur (maybe -a , function unclear).
Makaa	No unambiguous traces of inherited FV alternations found. Other North languages do have such traces (-a ‘neutral’, -i ‘Past, PFT’, -e SBJ), see Bantu above.
Obolo	No traces of inherited FV alternation found.
Otoro ¹⁰	ɲi-gwu-Ø-man-u ‘I cook, cooked’ (FAC), ɲi-gw-atɪ-man-a ¹¹ ‘I cook’ (IPFV) ɲi-gw-a-man-i ‘I may, shall cook’ (“subjunctive-like”). FV in the first example is the lexical vowel, in the second the IPFV, in the third has many uses.
Supyire	Possible to produce pairs that seem to show inherited FV alternations, e.g. naha ‘herd’ (PFV/FAC), nah-i ‘herd’ (IPFV), but this is illusion, as -i is an allomorph of -li (Carlson 1994:130-5).
Yoruba	No traces of inherited FV alternation occur. Closely related Igbo has some innovated morphemes at FV.
Zande	sir-a ‘lick’ (IPFV), sir-i ‘licked’ (FAC). This contrasts with the facts of Gbaya, another Ubangi language, where the suffixes are apparently reversed:
Gbaya	gɔm ‘split’ (unmarked, IPFV), gɔm-a ‘split’ (marked, FAC), kɔli ‘cough’ (unmarked, IPFV), kɔl-a ‘cough’ (marked, FAC)

As (3) shows, roughly half the families surveyed have a small set of morphemes at FV consisting of a single vowel and representing aspect: Mande (Bandi, not Bambara), Bantu (not all Bantu¹²), Bijago, Dogon, ?Doyayo, ?Ejagham, Fula, ?Kru, ?Kabiye, ?Kisi, Otoro, Ubangi. Among these single vowels, /-a/ and /-i/ predominate, with the predominant functional contrast being that of Factative (-i) versus Imperfective (-a) aspect¹³. But those are not the only patterns. Some have shifted the function of the vowels. Thus Ubangian Zande and Gbaya have reversed values for the two vowels, Bijago also has /-i / Imperfective, while Ejagham has one high or at

¹⁰ Otoro example from Schadeberg/Stevenson, forthcoming, thanks to Thilo Schadeberg. See Stevenson (2009).

¹¹ Where Otoro has **-ati-**, neighbouring Moro has **-ti-**. It is not clear if the **a** here is the same **a** as in the third (“subjunctive-like”) example.

¹² See Nurse (2008:268-276).

¹³ A very few (Bantu, Jukun, maybe Ijo, Otoro) also have a final vowel indicating Subjunctive mood, consisting of a mid-front vowel. This is ignored here because we are dealing with aspect.

least non-low front vowel but apparently only for Factatives which have focus function. Some have apparently shifted the vowels. Thus Otoro has Factative¹⁴ suffix vowels /-u, -ɔ/ with corresponding Imperfective /-a, -o/, others have reduced one vowel to zero, thus contrasting unmarked zero (most commonly in the Factative) with some other vowel, yet others have reduced both vowels to zero, leaving just a tonal contrast (Ejagham, much of Kru).

Nevertheless, the families or languages which have the contrast of /-i/ Factative versus /-a/ Imperfective, that is, parts or all of Mande, Bantu, Dogon, Atlantic, Ubangi, are typologically disparate and geographically distant, so it is implausible they have innovated the pattern separately. The best hypothesis on the basis of the current data is that in early or Proto-Niger-Congo the FV component of the verb nucleus expressed aspect, specifically a binary contrast between Factative (-i) and Imperfective (-a). More data and insights could modify this proposal.

One of the more controversial parts of this hypothesis concerns the status of the Factative. Mainstream crosslinguistic formulations usually contrast Perfective and Imperfective. Factative stretches across Niger-Congo from west to east. Is Factative an original Niger-Congo category, or did it spread across West and Central Africa, replacing Perfective? If so, was it an internal Niger-Congo development or was it transferred from another African phylum? If so, which one, and what is the distribution of Factative in Africa outside Niger-Congo? There is also the issue of marking. The proposal above is that Factative and Imperfective are commonly associated with /-i/ and /-a/, respectively. But how to reconcile that with the fact that Factative is commonly the unmarked member of the pair in contemporary languages?

1.2 Tense

1.2.1 *Aspect and tense*

Since most Niger-Congo languages – and many other languages worldwide - have only aspect, how do they indicate time reference? They can imply it via aspect. Factative, with dynamic verbs, and Perfective represent complete situations. Since most complete situations are in the past, the unmarked temporal value for Factative and Perfective is thus usually the past. Since imperfectives represent incomplete situations, they most often refer to the present or future. Within the general categories, more precision is given, just as it is for tenses, by using adverbials.

The unmarked values for the major categories can be modified by the context or by explicit use of adverbials. Factatives and Perfectives can refer to imminent (future) situations because many recently completed situations have immediate future implications. Affirmative imperatives are normally Factative/Perfective ('Eat!') but can be made Imperfective ('Keep on eating, Be eating when...'), while the opposite is true for negative imperatives. Imperfectives are essentially timeless so appear in situations where the English translation apparently refers to various times but that is in fact an artifact of the translation. In Yoruba, both Factative and Imperfective can be used in past, present, and future situations.

1.2.2 *Aspect systems and "future tense(s)"*

This section deals not with families with general tense systems (see next section) but with languages which are systemically aspectual but described as having one or more future "tenses". That is, they seem to have a single tense contrast between future and non-future, a feature that

¹⁴ Or would they be better viewed as stem vowels?

cuts across genetic boundaries in West Africa (also in Afro-Asiatic and Nilo-Saharan). They are of interest because crosslinguistically a binary tense contrast usually involves past and non-past, not future and non-future. Of the twenty-one languages examined, five¹⁵ have regular tense contrasts. Thirteen of the remaining sixteen are aspect languages but with one or more “futures”:

(4) Families with aspect systems and one or more “futures”

Family	Details
Bambara (Mande)	Binary contrast, “near” (béna) vs “remote” (ná). Preverbal AUXs. ná in both resembles ‘come’: yé is or resembles ‘be’ (FAC).
Dogon	Three strategies. How different semantically? 1. Use of the IPFV: this is not a discrete future tense 2. Reduplication of verb root (also in the Iterative) 3. Root -zaa + inflected form of post-verbal AUX ‘have’.
Doyayo (Adamawa)	Binary contrast. Semantic function unclear. Two forms represent future situations: they are structurally identical but tonally different from the PRG (itself based on the IPFV) and FAC, respectively.
Ewe (Kwa)	Single form. Prestem particle (l) a , formerly analyzed as tense, now as mood.
Fula (N. Atlantic)	Binary contrast. Suffixed form, ‘intend or expect to happen’. Probably derives from HAB with same shape, because habitual actions project into the future. Also what sources call a ‘vague future’.
Godie (Kru)	Binary contrast. Preverbal AUX. yi FUT-POT (‘may, will, must’) from ‘come’, ka FUT-VOL (‘will, want’) < ‘have’
Ijo	Single future (-ní (mI)), apparently tense, Now suffixal, but originally presumably a postposed AUX, of unknown origin.
Jukun (Benue-Congo)	Binary contrast, ‘certain’ vs ‘uncertain’. Both prefixal, both similar to IPFV marker in shape, which itself derives from ‘locative ‘be’.
Kabiye (Gur)	Three strategies. All preverbal aux/particles: ka Future < ? : wízi Near Future < ? : kóŋ FUTURE < ‘come’.
Kisi (S. Atlantic)	Single preverbal AUX co , said to be suppletive form of ‘be’ (?)
Obolo (Cross River)	Three prefixal ‘futures’: weak future (initial : á < ‘like, love’: Strong future prefix -ba- , second strong future prefix -ba-kí- .
Otoro (Kordofanian)	Single prefix -a- , with IPFV and SBJ finals. Also a ‘dependent future in -la- . Other Kord. varieties do it differently (e.g. Moro AUX ‘go’)
Yoruba (Volta-Niger)	Single preverbal AUX (y) ó or á similar in shape to ‘come’ elsewhere

Two languages are described as having three, five languages as having two, and five languages as having one future “tense”. A future tense is not necessarily the same as a strategy for representing future situations – some languages such as Dogon (and others in the total

¹⁵ Actually four, because in this respect Makaa and Narrow Bantu behave similarly.

sample) can use presents or imperfectives or auxiliaries to refer to future events, but they are not included here because they are not discrete forms.

Are these really future “tenses”? Future situations contain at least two parameters absent from past reference. They contain an element of uncertainty, distant situations being less certain than proximate ones. And they contain modal components such as wish, hope, possibilities, obligations, and so forth. Nearly all future situations have a temporal and a modal component, so the question is which is predominant, which forms are best described as essentially temporal with modal possibilities, and which as modal with future implications? There are some criteria to characterise future tenses. One would be how to ask and answer questions about future situations¹⁶. Another would be, if a language has two forms, one of which can only be used with today and tomorrow, the other only with more distant situations, then those would be well described as two future tenses, near and remote. Fleisch (2000) describes the Bantu languages Lucazi as having three future tenses, a simple, a definite, and a remote but all three are shown occurring with the same adverbial “tomorrow”, so clearly the temporal component is only one factor here. This would not happen in past reference, so either these are not really tenses, or else future tenses have to be defined differently from pasts, which refer to discrete or chronologically ordered time periods.

Of the thirteen languages in (4), only two (Bambara, Kabiye) have futures described in chronological terms, but even here supporting data and criteria are sparse. Of the other eleven, some are described in modal terms (intent, expectation, certain, uncertain, weak versus strong, potential, volitional), while for others no basis is offered, even for one or two to the point of admitting that the difference between them is unclear. This is a gray area, the descriptions being characterized by sparse data and unclear criteria. Traditionally, many West African languages were described in terms of tense, including future(s). More recent analyses have moved towards recognizing the modal component. Thus Ewe, traditionally analysed as having a future tense, has recently had this reanalyzed as a potential (mood) by an author who is both linguist and native speaker (Ameka 1991, 2005 a, b). It seems likely that at least some of the other sample languages might be so reanalyzed, but until we have reliable up-to-date analyses of the other languages, we have to suspend judgement on the status of future “tenses” in these and other West African languages. Until we do, we cannot make judgements about whether West Africa bucks the crosslinguistic trend by having a binary future versus non-future tense contrast.

1.2.3 Tense systems

Most readers’ view of tense in Niger-Congo will probably be coloured by familiarity with Bantu languages, all of which have tense contrasts, as far as we know. Languages in most non-Bantu Niger-Congo families do not have tense contrasts. As the preceding section indicated, early Niger-Congo had only aspectual and no tense contrasts. Tenses emerged only later, often apparently recently¹⁷, and in some branches are still emerging. (5) summarises languages with tense systems. As (4) suggests, there are plenty of Niger-Congo languages which might be interpreted as having future tenses but they are not included in (5) as having real tense systems.

(5) Niger-Congo families with tense contrasts (question mark indicates doubt)

¹⁶ E.g. How would one say: When she (write) the letter? She (write) it tomorrow.

¹⁷ “Recent”: Proto-Niger-Congo is likely at least ten millennia old (Blench 2006, Ehret p.c). Proposals for the emergence of tense in Bantu are in Nurse (2008).

Family	Details
Grassfields Bantu (61 varieties)	Some GB languages (e.g. Aghem) have two pasts and futures, some three, some even four or five (e.g. Bamileke), depending on the interpretation of P ₀ . The morphology involved in past and futures morphemes also varies from group to group, even language to language.
Narrow Bantu (500 varieties incl. Makaa)	The number of past and future contrasts varies from one to five (Nurse 2008:89). Over 70% have two or three pasts and one or two futures.
? Kru (39 varieties)	Kru as a whole seems to be moving towards instituting tense (Marchese 1986). Some western varieties have two pasts (and futures).
? Ijo (10 varieties)	It is possible to interpret Williamson's (1965, 1991) data as showing a past and a future tense, as she does, or to interpret at least the "past" in terms of aspect.
? Cross River (67 varieties)	Faraclas' (1984) interprets Obolo as aspect-prominent but suggests that eastern Cross River varieties may have a past tense.
Senufic (15 varieties)	Supyire has two past tenses and two future markers.
Zande	Zande has two past contrasts and at least one future. Boyd (p.c.), supported by the data in Monino (1995) and elsewhere, suggests Zande may be atypical for Ubangi, other varieties being aspect-prominent.

Although some of the target languages are analyzed by their authors as having tense systems, only Grassfields Bantu, Narrow Bantu, Senufic, and possibly Zande can be clearly interpreted as having these distinctions, and, as we have seen above, it is particularly past tense distinctions, or the combination of past and future tenses that count, as futures, although fairly widespread in West Africa, are of unclear status.

Grassfields languages show considerable internal variation in the number of tenses and in the morphology associated with them. Aghem (a western Ring variety) has a binary past and a binary future distinction: P₂ **mɔ**, P₁ **mɔ́**, F₁ **sɪ**, F₂ **ɪɔ́**. Mundani (a Mom variety), has three pasts and futures (Parker 1991), and Bamileke varieties are often described as having four or five of each (Hyman 1980, Anderson 1983, Satre 2002). In the languages with a binary contrast, the nearer member of the pair refers to hodiernal situations, the farther member to situations beyond today. In the languages with four contrasts the various degrees of reference are to the daily cycle (today, one day hence, three or more days hence, remote). However, those five described as having five might be an exaggeration by one, because the nearest past is a zero form, which refers to past situations with dynamic verbs but to current state with stative verbs. That combination of shape and reference suggests that it is rather a Factative or Perfect, and is thus possibly an aspect rather than a tense (?). Be that as it may, both the number of tenses (two, three, four) and the morphemes involved differ in Grassfields. For instance, with the possible exception of **ɪɔ́**, none of the four morphemes cited above for Aghem occurs in any of the Bamileke past tenses examined, and there is even variation inside Bamileke. On the other hand, the **mɔ** associated with past reference in Aghem does occur in some Bantu (A10) languages spoken not far away. In some Grassfields languages but not in others a pre-stem morpheme *-a-* is associated with past (and/or future) reference. Other than that, the morphemes involved in tense reference derive from auxiliaries, adverbs, or unanalyzable particles. This and the cognitive and

morphological variation in Grassfields suggest that tense contrasts are a relatively recent innovation in Grassfields, echoed by Parker (1991:185), talking of Mundani: “One can speculate that the perfective versus imperfective distinction was, historically, the fundamental distinction in the language, and that a complex tense system is in process of being superimposed on this basic aspectual distinction....there are many signs that the tense system is still evolving.”

Most (Narrow) Bantu languages differ from Grassfields in two respects. One is that their pre-stem structures are synthetic not analytic. The other is that all five hundred or so have tense distinctions and use generally rather similar morphology for tense, which is best explained by positing that tense distinctions were present at an early stage on Bantu and carried across central, eastern, and southern Africa as Bantu communities spread east and south out of Cameroon. It is agreed that this spread started some four or five millennia ago. This is not to say that the various sets of tense distinctions that exist today have existed in the same way for millennia, but that tense distinctions in general have characterized Bantu since its start.

On the other hand there are clear similarities between Narrow Bantu and Grassfields. As Grassfields, tense distinctions in Narrow Bantu languages with a binary past contrast distinguish hodiernal and beyond hodiernal, those with three distinguish hodiernal, hesternal, and three or more days hence, and those with four or more add a Remote category. As some Grassfields, many Bantu languages have pre-stem **-a-** as the central morpheme in past reference. Bamileke and a small handful of Bantu language share the distinction of having a four-way past tense contrast.

Assuming Supyire is typical of the Senufic languages, they have a synthetic structure and a binary contrast for both past and future. The near past (**-ní-**) represents hodiernal situations or situations felt to be emotionally closer and contrasts with the remote past (**-ná-**), which represents more distant situations. The two futures must be of more recent origin because transparently derivable from auxiliaries. Carlson is unable to detect any semantic difference between the two futures.

Consideration of Zande is complicated by differences between the two main data sources and claims about tense distinctions have to be made carefully. Tucker & Hackett (1959) differ from Boyd (1995) by apparently dealing with a different dialect, by having more forms (24 affirmatives versus 16 in Boyd), and by analyzing the data differently. That is, where Tucker & Hackett have a more traditional analysis involving tense and aspect, Boyd views Zande as aspect-prominent. Considering the two together – perhaps a mistake – then past tense, according to Boyd (1995:169) is “any verbal syntagma in which a low tone on a prefix is preceded and followed by a high tone”. That is, the contrast between past (HLH) and non-past past is encoded tonally. Within that framework, there is a contrast between an immediate (**-ní-**) and a more general past **/-a-/**. These two morphemes are also used to mark the distinction between an immediate and a more general future. That could be interpreted in either of two ways: either **/-a-/** ‘general’ and **/-ni-/** ‘immediate’ are neutral as to past versus future, and it is their use with the distinctive tone pattern for past (HLH) versus non-past that determines their tense reference, or since the two sources differ in the prosodic features (tone, length) of the two, we might assume that **/-a-/** and **/-ni-/** differ prosodically in some way, and it is the prosodic difference(s) that determines the difference between past and future reference.

Zande is said by most who have considered it to differ from other Ubangi languages, it being the atypical one (Nurse 2008:108,270,272). For our purposes it is atypical by having tense where other Ubangi languages are aspect-prominent. The whole long southern boundary of Zande is adjacent to Bantu-speaking communities, especially those of the C40 group, all of

which have not only a binary past tense contrast but also a set of other shared characteristics (Nurse 2008:113). Several of the segmental morphological characteristics are shared with Zande (for details, see e.g. the descriptions at <http://www.ucs.mun.ca/~dnurse/tabantu.html>). So it may be that these ways in which Zande differs from other Ubangi languages have to do with influence from the Bantu communities of Zone C.

Past tense reference in these four families or languages can be summarized thus. Cognitively, the most common distinction is between a near and a remote past, and among languages with this distinction (all except Zande (?)), that is realized as a contrast between hodiernal and pre-hodiernal. Even for Bantu, where many languages today have three or more pasts, it is likely that the or an early distinction was binary, marked by variations in pre-stem /-a-/ (Nurse 2008: 238ff). Morphologically, the distinction between different pasts is typically carried by some combination of pre-stem morpheme and tone¹⁸.

Historically, only Bantu and Supyire seem to have developed tense contrasts independently. Since Bantu languages all have tense and early Bantu communities spread east and south out of Cameroon between four and five millennia ago, it is more economical to posit that they carried at least the seeds of tense distinctions with them rather than positing that tense distinctions postdated the dispersal of Bantu communities and spread or developed independently in all five hundred languages. Since Senufic languages are spoken in an area (Mali, Ivory Coast) far removed from Cameroon and Bantu, and are not particularly similar to Bantu in other ways, tense distinctions are likely to have emerged separately in Senufic. In contrast, tense development in Grassfields and in Zande may have been induced by contact with Bantu. The Zande case is outlined above: tense distinctions in Zande probably have to do with contact with Zone C (especially C40) languages, either by Bantu communities having undergone language shift into Zande, or by continuous contact between adjacent Zande and Zone C communities. Likewise with Grassfields languages. Grassfields communities are all small, and small communities are less able to resist outside pressure than large: many are adjacent to Bantu and most are near to Bantu (map in Watters 2003:226): the number of tense distinctions and the morphology involved vary greatly within Grassfields, and in some cases is shared with adjacent Bantu languages. All this suggests that the emergence of tense distinctions in Grassfields is recent (see the quotation from Parker above) and probably in some cases at least the result of contact with adjacent Bantu, maybe as a calque, maybe each group having contact with a different adjacent Bantu group.

The possibility of tense distinctions developing as the result of contact is strengthened by considering Cross River languages and Ijo. The interactions between Narrow and Grassfields Bantu took place in western Cameroon. Cross River languages and Ijo are spoken a little to the west, in southeast Nigeria and the Delta region of Nigeria. Remarks in Faraclas (1984), the source for the tenseless Obolo variety, suggest that some eastern Obolo varieties may now have a past tense or past tense distinctions. Verbal categories in Ijo are carried either by post-verbal auxiliaries or suffixes, many of which have a CVCV shape and derive from independent auxiliaries, transparently not too long ago. Although we interpret the Ijo system as aspect-based, Williamson identifies two degrees of past and future. Whatever the shape of the older system in Ijo, it has visibly undergone a recent restructuring. The whole area in western Cameroon and southeast Nigeria seems to be a convergence area, one feature of which appears to be a slow movement towards tense formation.

¹⁸ Past tense distinctions in some Bantu languages are marked verb-finally or verb-initially.

The remaining family in (5) is Kru, marked with a question mark, because the status of tense distinctions in Kru varies. Godie seems to be an aspect-prominent language but Marchese (1986) the source, shows a continuum within Kru, ranging from aspect-prominent languages to eastern Kru varieties, where two past and two future tense have developed or are developing from the aspects seen elsewhere in Kru. Kru languages are not spoken too far away from Senufic, where tense is already established. Is the emergence of tense in Kru an independent phenomenon or part of an areal development involving Senufic?

1.3 *A very brief note on the terminology used in my Chapters ~ Sarah Rose*

Terminology is often the stumbling block in linguistics discussions (see Rose et al. 2002). My colleagues and I have spent years arguing over which terms should be used to describe certain basic aspectual distinctions; the pros and cons of such possibilities as “perfective/imperfective”, “completive/incompletive”, “performative/imperfective”, “factative/imperfective”, etc., have been discussed ad nauseam. In the final analysis, while we normally agree quite readily (albeit after much discussion), we have not reached consensus on this issue. Briefly, I offer here my rationale for some of the terminology I use in my Chapters.

First of all, I generally prefer the widely understood and familiar distinction “perfective/imperfect” (rather than “performative/imperfective”) for five main reasons:

1. This distinction is found throughout a wide variety of languages (Comrie 1976:25).
2. What is meant by these two terms, at least in broad strokes, is familiar and widely understood.
3. Most of the authors whose works I have consulted to compose my chapters use this familiar terminology (or, the virtually identical “completive/incompletive”).
4. Because most (or many) of the languages we discuss will be unfamiliar to most readers, I think that, in most cases, introducing rare or unfamiliar terminology (such as “performative”), to describe certain categories and verb forms might be counterproductive, as it adds another layer of difficulty. I am in no way impugning the term “performative”: it may indeed be just the thing for describing certain verb forms and constructions. I simply feel that—at this point in the discussion-- it introduces a level of theoretical “fine tuning” which is not entirely fruitful.
5. Additionally, it may be easily confused with the term “performative” in its better known pragmatic meaning: as an utterance which both articulates and “performs” what it says— e.g., “I pronounce you man and wife”. This latter term is more pragmatic than aspectual in nature, and refers more to the sentential meaning, than to the verb per se.

However, as mentioned above, it is true that many Niger-Congo languages show a phenomenon described first by Welmers & Welmers (1968:75, 76 later in Welmers (1973), where certain forms, despite being “unmarked” (bare verb stem), minimally marked (low tone), or marked by identical morphemes (-Vn in Degema, exemplified below), have meanings that cannot be straightforwardly called either “perfective” or “imperfective”. The Welmers termed these forms where the same marker has two meanings depending on whether the verb is active or stative, “factative” (*factive; *factitive). This term has been adopted by many who work with Niger-Congo languages (e.g., Faraclas (1996), Faraclas et al (2007), Marchese (1986) and Kari (2002).

Why “factative”? Welmers explains: “The construction expresses the most *fact* about the verb in question, which in the case of active verbs is that the action was observed or took place, but for stative verbs is that the situation obtains at present” (1973: 346-347).

The salient point here is that certain Niger-Congo languages use the same form (either an **unmarked** or minimally marked form, or, alternately, the **same** morphological marker), with different meanings depending on whether the verb is active or stative. A good example comes from the language Degema, described by Kari (2002:179):

- (6) a Factative marker with eventive (active) verb (= perfective aspect)

mɪ-dí-ɪn
 1s-eat-FAC
 ‘I ate.’

- b Factative marker with stative verb (= imperfective aspect)

o-mí-ɪn
 3s-be wet-FAC
 ‘It became wet/It is wet.’

Kari (p.c.) prefers the label factative (rather than perfective or imperfective) for the enclitic **-Vn** because: “In Degema (Edoid) and Kalabari (Ijoid) [...] the factative marks past in dynamic verbs but past/non-past in stative verbs. Given this situation, one can really not describe factative as perfective, since in stative verbs factative could have a non-past or timeless meaning/interpretation”.

Following Kari’s logic, it becomes a bit problematic simply to oppose factative and imperfective, as one interpretation of factative (with stative verbs) *is* imperfective. Factative taps into *both* members of the underlying aspectual structure; it can therefore not be clearly identified with either. Also implied, of course, is that there *is* an underlying aspectual system into which the factative can tap, depending on whether it is an active verb (construed in factative system as perfective = completed = past time reference) or a stative verb (construed in factative system as imperfective = not completed = present time reference or ‘timeless’).

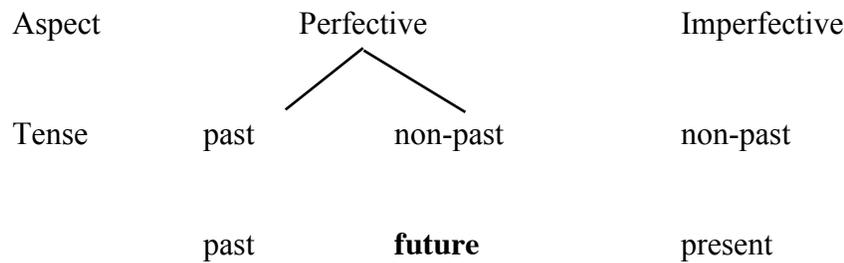
As Marchese points out in her study of Kru languages, certain diagnostic features serve to identify a “factative” system (at least in the Kru languages where they are extremely common). One feature is the typical *distribution* of factatives: The same marker always has two meanings: past with active verbs, present with stative verbs. A second diagnostic is the presence of two negation markers, reflecting the typical factative grouping of “past punctiliar actions and present states” in contrast to “imperfective or habitual” (Marchese 1986:32). As a consequence of this grouping, Marchese claims, factative languages always have two negation strategies: one strategy for negating the first category, another for negating the second. (Whether one could use the corollary and claim that if a language has but a single negating strategy, or more than two, it is NOT a factative language, I cannot say without further research. Kisi, for instance, shows evidence of a factative system, but has but a single negative.)

Given the problematic position of the “future” in many of our languages (outlined above), one might ask: where does the future fit into this system? How are factatives related to futures? Are they? The Welmers use tense (not aspectual) terminology: +past vs. +present. If, for

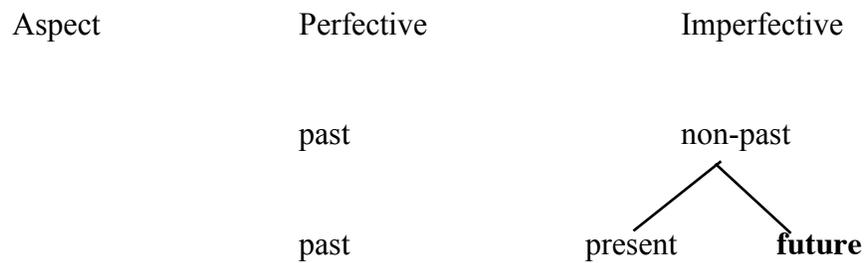
instance, we consider the default aspect of the eventive verb to be +completive/+perfective, could the future, and not only the past, be also included (as in certain Slavic languages, where there can be two forms: a perfective past (past tense) and a perfective non-past (future tense)? If on the other hand, the stative is interpreted not as present, but as non-past (including present and future), then the future belongs here, as an imperfective (or habitual) non-past. Unfortunately, neither of these scenarios appears to describe the situation fully, as neither an unmarked eventive nor an unmarked stative may necessarily be interpreted as a future—or both may. If the “non-past” interpretation is only available in the stative verbs in a factative system, how do we render an eventive future?

So what type of system are we looking at? Here are some cross linguistic possibilities:

(7) a TAM system opposes past vs. non-past. The future is a subset of perfective:



b TAM system opposes past vs. non-past. The future is a subset of imperfective:



These systems, and they are common, oppose past vs. non-past, with aspect determining the interpretation of the future. Alternatively, future meaning in a past/non-past system may be achieved by the use of modals. Although system (7b) is common in the languages we have looked at, it is in no way universal. In many of our languages the future is a separate category, often the only clearly marked *tense* form. Thus, rather than opposing past vs. non-past, many of our languages could be said to manifest the typologically rather rare opposition future vs. non-future. This is a topic that requires further study.

2

Aghem

(Bantoid, Grassfields Bantu)

Derek Nurse

2.1 General

Over 2.5 million people speak over fifty Grassfields Bantu languages, nearly all in the mountainous region of Cameroon's West and Northwest Provinces. The more southerly Grassfields Bantu communities adjoin Zone A of Narrow Bantu, particularly A10, A40, and A50. The average size of a Grassfields Bantu language community is some 50,000: this is raised by eight larger (100,000 to 300,000) communities, the others being quite small. Watters (2003), citing Stallcup (1980), notes the average community occupies twenty square kilometers or less. 20,000 to 25,000 people speak Aghem, 300,000 Bamileke-Dschang, the largest Grassfields community.

Syllables in Grassfields Bantu languages are open or end in sonorants, depending on language and level of analysis. Lexical stems are commonly monosyllabic: most lexical stems in Aghem are of CV shape, whereas many affixes consist of a single vowel. Grassfields Bantu languages have seven, eight, or ten vowel qualities: Aghem has ten short and eight long vowels, and eleven diphthongs¹. They also have very complex tone systems, partly because when segmental substance was lost, tones were in general retained and realized on an adjacent syllable.

Despite much work since the 1960s, Grassfields Bantu languages are not well described. What follows is an analysis of Anderson and Watters' work on Aghem in Hyman (1979). At the end we also look briefly at Hyman's (1980) analysis of Bamileke-Dschang, and depend on Watters' (2003) general overview, which also cites other analyses.

2.2 Word order

The characteristic word order in main and subordinate clauses in Aghem is S AUX V O X, or, as Watters (1979:143) puts it: S AUX V DO IO LOC TEM². Objects, nominal and pronominal, follow the verb. Examples:

(1) a **fɪ** **á** **mɔ**³ **zí** **kɪ-bɛ**⁴ **án** **'sóm**

¹We have used (ɪ) for Hyman's (1979:5) (i) and (ɔ) for his (θ). For simplicity's sake, with the exception of certain floating tones (as in §2.3), low tone is generally unmarked. The symbol (') indicates down-stepped tone.

²Abbreviations unique to this chapter: DS 'dummy subject', TEM 'temporal (adverb or phrase)'. Other abbreviations appear in the general List of Abbreviations.

³Surface tones are not necessarily underlying tones. For instance, in this and following examples (and in Table 2.1), the underlying high tone on the P₂ morpheme **mɔ** has moved rightwards. See Anderson (1979:133-135).

⁴The nouns for 'fufu' and 'compound' are segmentally and tonally identical, and in the same noun class. Nouns consist of root and affix – the affix (the class marker) may be prefixed (e.g., **kɪ-bɛ**) or suffixed (**bɛ-**

friends they P₂ eat fufu in farm
 ‘Friends ate fufu at the farm.’

b **bvó tí má'á á kí'bé á'zso ñín**
 dogs they P₂.FOC in compound yesterday run
 ‘Dogs ran in compound yesterday.’

c **ffi á mɔ fúo kfbé á bvó'tó**
 friends they P₂ give fufu to dogs
 ‘Friends gave fufu to the dogs.’

d **ffi á mɔ nzang zóm á ba?tom**
 friends they P₂ nzang sing for chief
 ‘Friends sang Nzang for the chief.’

This basic order may change, principally by the application of focus (as in (2b)), primarily by placing focused elements immediately after the verb⁵. *Wh*-words are always focused, and also other elements (underlined) may be focused:

(2) a **ffi á mɔ zí ghé bé'kó**
 friends they P₂ eat where fufu
 ‘Where did friends eat fufu?’

b **a mɔ zóm á-ffin nzang á ba?tom**
 DS P₂ sing friends nzang for chief
 ‘Friends sang Nzang for chief.’

c **ffi á mɔ zí án 'sóm bé'kó**
 friends they P₂ eat at farm fufu
 ‘Friends ate fufu at the farm.’

2.3 Verb structure

The verb string appears to contain eleven positions, not all of which co-occur. Finals are suffixed to the root; all other elements are self standing, so, morphologically, only Root-Final is part of the verb, the rest being clitics or independent elements. All are exemplified below, or in §2.4, §2.5, or §2.6. Word order plays a major role in focus (see §2.5.3, below, and (1) and (2), above) and the positions immediately before and after Root-Final are central to focus. Consequently, other sentence constituents can occur in these positions.

¹**kó** depending on its focus value. The same obtains with the word for ‘mat’, which, depending on focus value, may be either **í-ghám** or **ghám-fo** (as in Table 2.1). See also Hyman (1979:16).

⁵ “There are a number of Grassfields languages including Mankon, Dschang, and Aghem, where S AUX O V occurs, either with specific auxiliaries and/or the focus” (L.H. Hyman p.c.). See (1b), where P₂.FOC would represent the AUX.

(3) HYP SM CFL NEG_{1/3} T SBJ ROOT-F HAB NEG₂ FOC

Morphemes occurring in these positions are listed below and exemplified in examples (4)-(8):

HYPothetical: **tɔ̀** ‘would/should (have)’

SM: subject marking is obligatory. Subject pronouns are: 1s **N**´, 2s **wo**, 3s **o**, 3s logophoric **é**, 1p **gha?**´, 1p inclusive **se**´, 2p **ghɛ**´, 3p´ **ghé**. Object pronouns are identical except 1s **muo**´ and 3s´ **wín**. Inanimate objects are usually represented through zero anaphora.

Counterfactual: **fɛ**´ CFL₁, **fí**´ CFL₂. These indicate that the statement which the sentence affirms is not really true. They derive from demonstratives for ‘here’ and ‘there’, respectively. Since these and NEG₁ are not shown co-occurring, it is not clear which comes first. (See example (5) in §2.6).

NEG₁: **ka**, with two different tone patterns; NEG₃ non-main clause NEG. (See §2.6);

Tense (Aghem): **Ø** present/Factative (see footnote 6), **mɔ** P₁,´ **mɔ**P₂, **sɪ** F₁, **lɔ**F₂, **ń** (H+L) present+FOC, **máa** P₁+FOC, **má!á** P₂+FOC, **fí** ‘once upon a time’, **me** SBS (subsecutive) ‘then’ (the commonest realization of the SBS is a homorganic nasal, making it tonally and segmentally homophonic with the present non-focus form). (See §2.5.3).

Tense: (Dschang: this includes only time reference, so is not complete):´ **á** P₁, **áa**, P₂, **ke** P₃, **le** P₄, **le+lá?** P₅, **á** F₁, **á piŋ** F₂, **á lu/ʃo?** F₃, **á lá?** F₄, **á fú** F₅. Hyman also shows a “CNS” (consecutive) nasal, identical with the reduced SBS (subsecutive) form in Aghem.

SBJ: underlying /é/. The vowel deletes in perfectives, leaving the tone. (See §2.5.1).

F: Anderson (1979:77) divides verbs into three classes. Class 1, containing half of all verbs, contrasts PFV (with a zero FV) and IPFV (-a). IPFV -a has many allomorphs, including vowel copy. Class 2, the smallest of the classes with only five percent of verbs, reverses zero and -a, for reasons that are unclear. Class 3 has no PFV/IPFV distinction, but has three other FVs, apparently lexically arbitrary: **-nɔ** **-so** and zero. Each has two shapes, depending on position in the sentence. **Sɔ** appears to be the relic of an archaic causative. There is no overall distinction between extension and final, found elsewhere in Niger-Congo.

HABitual: **tsɪgha**.

NEG₂: **yɔ**

FOCUS: **no**. See §2.5.3, following.

- (4) HYP **tó o bo-ó figham**
 HYP 3 hit-IPFV mat
 ‘3 could be hitting the mat.’
- (5) CFL ...**é fí 'ló baʔtóm odzɪŋ**
 ...3 CFL₂ be chief good
 ‘(X thought that) he was a good chief (and X was wrong because he wasn’t).’
- (6) FV Class 1 (PFV, then IPFV): **bó – bo-o** ‘hit’, **bó – bɔ-ɔ** ‘be bad’, **pú – pu-u** ‘die’, **tá – ta-a** ‘sew’, **ná-m – na-a** ‘cook (fufu)’, etc. Class 2 **nó – nɔ-m** ‘grow’. Class 3 **moo – moo-n** ‘live, stay’, **yɔs-ɔ – yɔs-i** ‘3p, yawn’.
- (7) Object pronouns: **o mɔ kɔʔ wo** ‘3s saw you.’
o mɔ nam kíbé â wo ‘3s cooked fufu for you.’
- (8) Focus: a **énáʔ mɔ ñíŋ nô** but **a mɔ ñíŋ énáʔ**
 Inah P₂ run FOC DS P₂ run Inah
 ‘Inah ran.’ ‘Inah ran.’ (Inah focused)
- b **fí á mɔ békí zí án 'sóm**
 friends SM P₂ fufu eat in farm
 ‘Friends ate fufu in the farm.’ (fufu preposed, in farm focused)
- c **fí á mɔ án 'sóm zí kíbé**
 friends SM P₂ in farm eat fufu
 ‘Friends ate fufu in the farm.’ (in farm preposed, fufu focused)

2.4 Tense, aspect

The data presented by the authors, especially Anderson, in Hyman (1979), shows three aspects and five tenses. P₁ and F₁ represent hodiernal, F₂ and P₂ beyond hodiernal. Whether they are absolute or relative is not mentioned. The PFV is unmarked, IPFV is marked for the largest verb class by -a, and HAB builds on IPFV.

Table 2.1 Tense, aspect in Aghem

	Perfective	Imperfective	Habitual
P ₂ mɔ	o mɔ bó fíghám 3s hit the mat	o mɔ bóo fíghám 3s was hitting the mat	o mɔ bóo tsíghá fíghám 3s used to hit the mat
P ₁ mɔ	o mɔ bo fíghám 3s hit the mat	o mɔ boó fíghám 3s was hitting the mat	

Present Ø	o bo fghâm ⁶ 3s (has) hit the mat	o boó fghâm 3s is hitting the mat	o boó tsgha fgham 3s hits, is hitting the mat regularly
F ₁ st		o st boó fgham 3s will hit the mat	
F ₂ lɔ		o lɔ 'bóo fgham 3s will hit the mat	o lɔ 'bóo tsghá fghâm 3s will hit the mat regularly

The gaps are not accidental. Indicative perfectives only occur in the non-future. Imperfectives occur with all five tenses. Habitual only occurs with distant past and future, which Anderson explains by saying that one day/today is not sufficient time for a situation to become habitual⁷.

2.5 Other categories

2.5.1 Mood⁸

Subjunctive, indicated by /é/, occurs only in non-pasts. Unlike the past, the future has perfective and imperfective variants, and /e/ deletes in perfectives ((9d)):

- (9) a **o e bó-o ghâmfo**
3s SBJ hit-IPFV mat
'3s should be hitting the mat (now).'
- b **o sé-e bó-o ghâmfo**
3s F₁-SBJ hit-IPFV mat
'3s should be hitting the mat (later today).'
- c **o e bóo tsghá 'ghâmfo** '3s should hit the mat regularly.'
- d **o st bó fghâm** '3s should hit the mat later today.' (underlying **st + é**), vs:
- e **o st boó fgham** '3s will hit the mat later today.'

The first three examples are imperfectives, with an underlying and a surface subjunctive. The fourth form is a perfective, with underlying subjunctive /é/ deleted but its tone transferred to the [bó]. The fifth form is a future indicative (so no /é/), necessarily imperfective. This is complicated and set out in Anderson (1979).

⁶ This unmarked form is a Factative, in the sense of Welmers (1973) or Faraclas (1996), where an otherwise unmarked form represents the past with active verbs, and the present with stative verbs: cf. (13b)

⁷ Anderson's remark would also apply to other Niger-Congo languages, e.g. the Bantu language Haya (E22), where the habitual suffix only occurs in Far Past and Far Future.

⁸ Anderson (1979:103-11) treats "hortative" (our SBJ), IMP, HYP, and CFL as moods, all marked in comparison to the unmarked indicative. See §2.3.

2.5.2 Imperative

Imperatives, when used alone, not followed by an object, are in the IPFV form, so: **bó-o** ‘Hit (it)’, **bó-o tsigha** ‘Hit (it) regularly’. Compare SBJ **é bó-o** ‘Hit’, said to be “almost synonymous” with the imperative.

2.5.3 Focus

Focus in Aghem is an elaborate and unusual system, and its analysis occupies a lot of space in the source⁹. What is here called ‘focus’ is similar to ‘emphasis’ in accounts of other languages, e.g. Yoruba. This short section does not attempt to summarise the whole system but concentrates only on the parts expressed by the verb.

Focus is defined in general as “that information in the sentence that the speaker believes, assumes or knows the hearer does not share with him or her” (Watters 1979:137). Watters (1979:137,177) recognizes as focus types in Aghem: unmarked, assertive, counter-assertive, polar, counter-assertive polar, and exhaustive listing, to which Anderson adds “completive”. Five strategies are associated with focus marking: noun shape, word order, cleft sentences, verbal morphology, and the “particle” **no**. We discuss only the last two here.

Anderson (1979:97) says of completive focus that it “is used to insist that something has indeed taken place in the context of someone having denied or questioned its completion”. Completive focus only co-occurs with the two perfective pasts and the perfective present. It asserts that the situation did occur. Thus:

Table 2.2 Completive focus in Aghem

	Factative, non-focus	Factative, with focus
P ₂ (Pre-hodiernal)	o mɔ́ bó fghám 3s hit the mat	o má¹ á bó ghámfo 3s <u>did</u> hit the mat
P ₁ (Hodiernal)	o mɔ́ bo fghám 3s hit the mat	o máa bó ghámfo 3s <u>did</u> hit the mat
Present	o bo fghám 3s has hit the mat	o ím¹ bó ghámfo 3s <u>has</u> hit the mat

Comparing the focus and non-focus forms here suggests that the former results from a fusion of two morphemes. The consonantal part of the present factative focus is a homorganic nasal, identical in form to the subsecutive mentioned in §2.3 above.

Another focus marker, **no**, occurs to the right of the constituent which it marks as focus. It may indicate various types of focus. If it occurs after the verb, as in the first sentence below, it will be formally different but functionally identical with sentences whose focus is indicated in other ways. If it occurs as in (10a), it may focus on the entire sentence or just the verb. As the other examples show, it may follow other constituents:

⁹ One of three chapters, plus other pages, over a third of Hyman (1979).

- (10) a **fú kǐ mō n̄n̄ nō**
 rat SM P₁ run FOC
 ‘The rat ran.’ (Hyman 1979:166)
- b **fú kǐ mō n̄n̄ nō á kǐ bé** ‘The rat ran (i.e. not walked) in the compound.’
- c **fú kǐ mō n̄n̄ á kǐ bé no** ‘The rat ran in the compound (not the house).’
- d **a mō fuo á-wé nō bé kǐ á fngǎ**
 DS P₁ give children FOC fufu to friends
 ‘The children gave fufu to the friends.’ (1979:168)

2.6 Negation

Aghem has four negative formatives: 1. **ka** and **ká**, 2. **yó**, 3. **ke** and **táke**, and 4. **dzi**. They vary in segmental shape, tone, position, and function. Low-toned **ka** (NEG₁), placed between subject and verb, occurs with perfectives (past, present) and imperatives. High-toned **ká**, occurs with subjunctives. The second formative, high-toned **yó** (NEG₂), occurs between verb and object in imperfectives (present, future, habitual). The third formatives (NEG₃) characterize negatives in non-main clauses. The first member of the pair, **ke**, a “consecutive”, joins two clauses with the same subject, preceding and negating the second; the second member **táke** occurs with relatives, conditionals, and subsecutives with different subjects, immediately preceding the verb. The fourth marker, **dzi**, is relatively minor. When it occurs with NEG₂, it always precedes it. It has to co-occur with NEG₁ or NEG₂ and provides contrastive emphasis to a previous affirmative statement. Focus plays a role in negation. Object nouns with a class prefix are “in focus”, while those with suffixed or postposed class markers are “out of focus”. Examples of all the above:

- (11) a Past **o kaa bó ghámfo**
 3s NEG hit mat
 ‘3s didn’t hit the mat.’
- b Imperative **ka bó ghámfo** ‘Don’t hit the mat!’
- c Subjunctive **o ká bó ghámfo** ‘3s shouldn’t hit the mat.’
- d Imperfective **o bo-ó yó ghámfo**
 3s hit-IPFV NEG mat
 ‘3s isn’t hitting the mat.’
- e Future **o ló bó-o yó ghámfo**
 3s F₂ it-IPFV NEG mat
 ‘3s won’t hit the mat.’

- f Habitual **ghé b6-o tsigha y6 ghâmf6**
 3p hit-IPFV HAB NEG mat
 ‘They don’t habitually hit the mat.’
- g “Completive consecutive” **o m6 z6m ke b6m**
 3s P₂ sing NEG dance
 ‘3s sang and didn’t dance.’
- h Relative **wu wɪ a o m6 táke nám kfbé**
 person this REL 3s P₁ NEG cook fufu
 ‘The person who didn’t cook fufu...’
- i Consecutive (with different subject) **o m6 nam kfbé yia n m6 táke zɪ**
 3s P₁ cook fufu and 1s P_{1/2} NEG eat
 ‘3s cooked fufu and I didn’t eat (it).’
- j Contrastive emphasis **o ka bo dzɪ ghâmf6**
 3s NEG hit NEG mat
 ‘3s DID NOT hit the mat.’

Watters (2003:250) points out that in Grassfields Bantu in general the use of a discontinuous negative marker, not found in Aghem, is common. The first marker is placed as **ka**, above, while the second morpheme is placed at the end of the clause or sentence. This final morpheme often has the shape **b6/w6** (also Narrow Bantu C85).

2.7 ‘Be’ and ‘have’, and sources for other formatives

Copula ‘be’ is rendered by **lo** (12a), which is slightly irregular. It is inherently IPFV, not varying in shape for IPFV vs. PFV, as many other verbs. Otherwise, it takes tense and HAB markers. ‘Have’ is rendered by **kí** (12b).

- (12) a **o m6 lo kfb6**
 3s P₁ be servant
 ‘3s was a servant.’
- b **o ki fghâm** ‘3s has a mat.’

The two counterfactuals derive from locative demonstratives; HAB from a verb (**é**)-**tsfghá** meaning ‘(to) pass’.

In Dschang, the four more distant futures consist of the F₁ /-a-/ marker, followed by other morphemes, which derive from auxiliaries (F₂ ‘return’, F₃ ‘get up/come’, F₄ ‘pass the night’, respectively). The nasal preceding the main verb in at least P₂, P₅, and F₂ is a consecutive marker. Possible sources for past markers are not given.

2.8 Bamileke-Dschang

Watters (2003:247) observes that Bamileke languages (a subset of Mbam-Nkam) have the largest set of tense contrasts in Grassfields Bantu. One of them is sketched here as an illustration, based on Hyman (1980). Dschang has five contrastive pasts and futures (some phonetic details are omitted in this display). See under §2.3 for tense morphemes.

Table 2.3 Dschang tenses

Past	Future
P ₁ aá 'tán '3s bargained'	F ₁ a' á tán '3s will bargain'
P ₂ a áa ntán	F ₂ aa 'piŋŋ tán
P ₃ a ke tán'ŋ	F ₃ aa 'lu'ú tán or aa 'fu?'é tán
P ₄ a le tán'ŋ	F ₄ a' á lá?é 'tán
P ₅ a le lá? n'tán	F ₅ a' á fú 'tán

When used absolutely, with the day of speaking as the reference point, these represent reference to: 1. just have/just about to, 2. same day, 3. hesternal/crastinal, 4. a few days away, and 5. a long time away, respectively. But they can also be used relatively, where the first verb establishes a time other than the present, and the second verb represents the time of an action relative to that. In a sentence such as '3s said (P₃) that you will see (F₃) the child', the P₃ refers to yesterday, and the F₃ may be used absolutely or relatively. If used absolutely, it will refer to the day following today, i.e. tomorrow, and if used relatively, it will refer to the day after yesterday, i.e. today. There are certain restrictions on the co-occurrence of tenses. Speakers may manipulate the system and deliberately "misuse" combinations in order to communicate a subjective point of view. The tense system of Aghem and its morphemes differ significantly from those of Bamileke-Dschang.

3

Bambara (2) (Manding, Mande) **John Hewson**

3.1 General

The draft of this sketch dates from 2004, and was enlarged and updated in 2011 with the much appreciated help and advice of Valentin Vydrine, who corrected errors and provided valuable information on recent analyses, particularly Blecke (2004), Dumestre (2003), and Idiatov (2000).

Bambara (also known as Bamanankan), and its closely related dialect of Dioula (Jula), are spoken by some seven to eight million people in Mali, Guinea, Sierra Leone, Senegal, Burkina Faso, Côte d'Ivoire, and Gambia. It is used not only as an ethnic language, but also as a lingua franca. There is a quite extensive literature on this family, exemplified, for example, by *La langue mandingue et ses dialects: malinké, bambara, dioula*, a 650 page tome by Maurice Delafosse, published in 1929, with an interesting historical introduction, but not usable in any serious way because it conflates the data of several closely related languages. There are other materials of an equal age, but sketchy and incomplete.

Fortunately, because Bambara is a lingua franca, there are also modern texts designed for teaching the language that give adequate and well-planned descriptions, one in German by Raimund Kastenholz (1998), and one in French by Demba Konaré (1998), a native speaker, who writes the tones, in the usage of native speakers, only where they are needed to avoid confusion; his book is for use in Africa where the language may be heard on a daily basis. Kastenholz, on the other hand, carefully marks the tones of each lexeme: his book is for use in Europe where native speakers are not easily accessible. In the examples we have borrowed, we have followed the practice of the original author, marking tones only where they are given in the original source materials. To these basic materials must be added the more recent materials mentioned above.

The vowels are /i, e, ε, a, o, u/, all seven of which can also be long or nasalized (21 vowel contrasts). There are two marked tones, high tone being marked by an acute accent, and low tone by a grave accent. Roman letters are used for consonants, with the addition of **ŋ** and **ñ**, and **c** which represents a fronted palatal /k/. Nasal vowels are represented by syllable final **-n**, as in **bòn** 'be big', **dénke** 'son', **mìnnogo** 'thirst', the same convention as in French, and long vowels by gemination, as in **náani** 'four'.

3.2 Word order

Bambara is an SOV language, but the subject is typically followed by a variety of auxiliary elements. The auxiliary precedes the OV nucleus, to produce the following pattern:

- (1) S AUX O V X

If the object is omitted, the verb automatically becomes intransitive, and takes on a passive meaning. Only transitive verbs can form this type of passive which is dependent upon deletion of the DO.

- (2) **Sidi bɛ Moussa fo** → **Moussa bɛ fo**
 (S + AUX + O + V) (S + AUX + V)
 ‘Sidi greets Moussa.’ ‘Moussa is greeted.’

3.3 Verb Structure

The verbal morphology does not distinguish transitive from intransitive verbs: the distinction is accessible only through the syntax. There is also a distinction between dynamic and stative verbs, which is marked by different auxiliaries, and by different ways of forming past reference: dynamic verbs which are intransitive mark past reference with the suffix **-ra**, whereas stative verbs mark past reference with the morpheme **tùn** (see Blecke 1988/2004), which may be an Attestive marker (for details, see §3.4.2). There are a few regular extensions of the verb, which take the form of prefixes. Their usage is illustrated in §3.6. The structure of the verb may be diagrammed as follows:

- (3) EXT-ROOT-F

Only three elements appear in the initial slot (see §3.6). We have termed them “extensions” based on their function¹: as with extensions in other languages, they derive new lexemes. The ones we have cited are all causatives, but there are others².

EXT: **la-**, **ma-**, **so-** (see examples in (24))

At final may appear suffixes which form verbal nouns and participles (see §3.5 and §3.10.1) as well as **-ra/-la** (see §3.3.2) and modal element **-na** (see §3.4.1), which latter apparently appears only in combination with **bɛ** ‘be’.

- F: **-ra/-la/-na** (intransitive “preterit”) (example (12b))
 -na (modal) (examples in (20))
 -len, -tɔ, -ta (in participles)
 -li (which derives verbal nouns, as well as various derivational suffixes. See §3.6)

3.3.1 Verb paradigms

There is a simple set of personal pronouns that is used for all functions: subject, object, possessor. The 2nd person singular is always used for a singular person; the 2nd person plural form always has plural reference. As in many languages of the region, first and second person have a different tone from the two third person forms: in Bambara the third person forms have low tone. The indeclinable personal pronouns are used in the

¹ Their “syntactic and semantic functions are largely comparable to the (post-radical) verbal extensions of Niger-Congo” (Kastenholz 2000:327-328).

² See Kastenholz (2000).

possessive construction where the possessor precedes the possessee: **ń fà, í fà, à fà** ‘my father, thy father, his/her father’. These pronouns exist in both Emphatic and Non-Emphatic forms. In the following paradigms the Emphatic forms are in second position.

(4)	Singular		Plural	
	ń né	I/me/my/mine	ánw ánw	we/us/our/ours
	í é	thou/thee/thy/thine	á(w) á(w)	you/your yours
	à àle	he/she/it/him/her/etc	ù òlu	they/them/their/theirs

Verb forms in the present use the auxiliary **bé** (the lexically incomplete form of ‘be’) with the verb stem, which does not change throughout the paradigm, as in (5). The present is formed, in short, by a Progressive aspect with the auxiliary **bé**, and these present forms may have both immediate and generic reference. Another auxiliary **yé**, a contrasting, lexically complete form of ‘be’, produces a Performative (Factative in Welmers 1973) aspect which is used for past reference, as in (6).³ (The contrast is similar to that of Spanish **ser** and **estar**: other verbs do not have contrastive complete/incomplete lexemes).

(5)	ń bé tága	‘I’m leaving, leave’	ánw bé tága	‘we are leaving, leave’
	í bé tága	‘you s. are leaving, leave’	á(w) bé tága	‘you p. are leaving, leave’
	à bé tága	‘3s is leaving, leaves’	ù bé tága	‘they are leaving, leave’
(6)	ń yé tága	‘I left’	ánw yé tága	‘we left’
	í yé tága	‘you s. left’	á(w) yé tága	‘you p. left’
	à yé tága	‘3s left’	ù yé tága	‘they left’

There is also a negative form, **té**, which creates negative clauses for the auxiliary **bé** in a parallel paradigm, exemplified here with the verb **ná** ‘come’. The corresponding negative for **yé** is **má**, as in **à má ná** ‘3s did not come’, **ù má ná** ‘they are not coming, etc’ (see Section 3.8)

(7)	ń té ná	‘I’m not coming, etc’	ánw té ná	‘we are not coming, etc’
	í té ná	‘you s. are not coming, etc’	á(w) té ná	‘you p. are not coming, etc’
	à té ná	‘3s is not coming, etc.’	ù té ná	‘they are not coming, etc’

This negative is also used in nominal sentences, as in the following, where **kàba** ‘maize’ and **kába** ‘stone’ are used to show the occasional minimal pairs with tonal distinctions.

(8) **kàba té; kába dòn** ‘Maize it is not; that’s (a) stone.’

Verbs, as noted, are either transitive or intransitive: in transitive sentences there must be a direct object, placed between the auxiliary and the main verb.

³ In some dialects, for example (see Travélé 1955:13), the Performative form of ‘be’ (**yé**) is used for generic (e.g. ‘he always leaves early’) reference, where Perfectives can *not* be used.

- (9) **ánw bé bàṃaw gén** ‘We hunt crocodiles.’⁴
ń fà bé bàṃaw gén ‘My father hunts crocodiles.’

3.3.2 Stative verbs

Stative verbs are normally intransitive, and are marked by the stative auxiliary **kà** in the affirmative (examples (10 a,b,c)) and its counterpart **mán** in the negative (10e). The past is expressed by means of the morpheme **tùn** which precedes the auxiliary and indicates the sentence is not about the present, but about what was observed earlier (examples (10 d,e)).

- (10) a **ń ká kòrò** ‘I am old’
 b **í ká jàn** ‘you s. are tall’
 c **mùso kà ńì** ‘the woman is pretty’
 d **à tùn ká fín** ‘it was black’
 e **fíni tùn màn bílen** ‘the cloth was not red’

Since there is no verb ‘to have’, possession is indicated by ‘be’ + an adpositional phrase, using the postposition **fè** ‘by, through, in the reach of’:

- (11) a **wári bé ń fè**
 money be.IPFV me by
 ‘I have money.’
 b **wári té ń fà fè**
 money NEG.IPFV my father by
 ‘My father has no money.’

3.3.3 Dynamic verbs

Dynamic verbs require the (progressive) AUX **bé**, and require the direct object to be placed before the main verb, which then has a present meaning. A so-called “preterit” (Kastenholtz 1998:58) is also found with intransitive verbs, whereby the main verb acquires a suffix /-ra/, which becomes [-la] after /r/ or /l/, and [-na] after /m,n/ or nasal vowel. Noun modifiers, such as numerals, are typically postposed, but demonstratives are preposed. These “preterits” may have a resultative sense (‘he has gone to sleep’ = ‘he is asleep’) with certain verbs. They are commonly labeled Perfectives, but their usage resembles that of English (and Germanic) Performatives (*Factatives* in Welmers 1973:246-7) rather than Russian (and Slavic) Perfectives (see Idiatov 2000:25, for example). They are consequently labeled *Performatives* in what follows.

- (12) a **ńìn cè fì la tága-ra**
 these men two go-PFM
 ‘These two men went off.’

⁴ Regular plurals are made by adding **-w** to nominal stems: **bàṃaw** is the plural form of **bàṃa** ‘crocodile’.

- b **mògòw yè-la kòsèbè**
 people laugh-PFM much
 ‘The people laughed much.’
- c **áw síran-na kójugu**
 2p be.scared-PFM terribly
 ‘You were terribly anxious.’

With transitive verbs the “preterit” is expressed by the Performative auxiliary **yé**:

- (13) **dònsow yé màli dúuru fàga**
 hunters be.PFM hippo five kill
 ‘The hunters killed five hippopotamuses.’

For both transitive and intransitive verbs, the negative **má** replaces both **yé** and **-ra** and stands between the subject and the object, or the subject and the verb:

- | | | | | |
|------|---|--|---|---|
| (14) | a | dònsow sé-ra
hunters arrive PFM
‘The hunters arrived.’ | b | dònsow má sé
hunters NEG arrive
‘The hunters haven’t arrived.’ |
| (15) | a | ń yé à dón
1s be PFM it perceive
‘I (perceived) know (it).’ | b | ń má à dón
1s NEG it perceive
‘I don’t know (it).’ |

This rather unusual distribution of “preterit” markers appears to be based on the syntactic requirement for a transitive verb to have an auxiliary preceding the DO.

3.4 Auxiliaries

There are several auxiliaries, some of which are clearly verbal, others appear to be modal, and yet others are markers of relationships of equivalence. There are no tense distinctions, the finite forms of the verb (e.g. main clause verbs that have an explicit grammatical subject) are all representations of the Vast Present, the single tense that represents the whole of universal time.

There is an incompletive vs. completive aspectual distinction which by means of auxiliaries becomes Progressive versus Performative. The incompletive auxiliary **bé** forms a Progressive, which represents the continual activity of the present, whether it be generic or actual. The completive auxiliary **yé** creates a Performative (Factative in Welmers’ terms) which necessarily represents the past, since whatever is complete in the Vast Present must necessarily be over, an event that the memory has recorded as complete. These are the typical aspectual representations of the Vast Present of languages that have no tense distinctions. For some of the auxiliaries the negatives are also distinctive. Contrastive pairs may consequently be presented as follows, along with the Performative marker for intransitive verbs, which has the suffix /-ra/ (see §3.2 above).

- (16) IPFV **bé** + verb = Vast Present (negative **té**)
 PFM (transitive) **yé** + verb = Performative (negative **má**)
 PFM (intransitive) verb-**ra** = Performative (negative **má**)

There are three other auxiliaries that function as copulas, one that has a demonstrative element, but may be an impersonal verb (similar to French *c'est*), one that marks equivalence, and one that turns adjectives into stative verbs.

- (17) Demonstrative **dòn** (Negative **té**)
 Examples: **fini dòn** ‘That is a cloth’ **fini té** ‘That is not a cloth’
 sò dòn ‘That is a horse’ **sò té** ‘That is not a horse’
- (18) Equivalence **yé ... yé** (Negative **té ... yé**)
 Examples: **à yé dùlòki yé** ‘It is a shirt’
 à té dùlòki yé ‘It is not a shirt’
 nìn yé mùru yé ‘This is a knife’
 nìn té mùru yé ‘This is not a knife’
- (19) Stative verbs **ká** (Negative **mán**)
 Examples: **jíri ká kòro** ‘The tree is old’
 jíri mán kòro ‘The tree is not old’
 dùlòki ká kúra ‘The shirt is new’
 dùlòki mán kúra ‘The shirt is not new’

The form **ká** is also used for alienable possession. Inalienable possession is represented by a simple *casus constructus* where the possessor precedes the possessee, but **ká** is used between the two items for alienable possession: **mùso fà** ‘the woman’s father’; **mùso ká líburu** ‘the woman’s book’. Since **ká** appears to be a linking element for both predicate adjective and possessee, it is probably the same morpheme in both usages. It should be noted here that what is at issue is the question of permanence. The morpheme **yé**, apparently the same element as the preterit marker, marks the permanence of the bond between subject and complement, whereas **ká** marks the temporary relationship between the two.

3.4.1 *The prospective auxiliaries*

There are two forms used to represent the future, both employing a modal auxiliary. One is a combination of the present marker **bé** with the prospective marker **ná** to form the compound **béná**; this has a near future reference. The other is the prospective auxiliary **ná** by itself, which refers to a more distant, more modal future, as in the following examples. This word resembles **nà** the verb ‘to come’, but is high toned, as seen in the last example below (data from Konaré 1998).

- (20) a **ù bé na í dè me** ‘They will help me’

b	ń ná wári cáman sòro	‘I’ll make a lot of money (at this)’
c	à béna sà	‘He’s going to die (terminal illness)’
d	à ná sà	‘He will die (we all die some day)’
e	fúrakela ná nà	‘The specialist will come (sometime)’

3.4.2 morpheme *tùn*

The morpheme **tùn** has been extensively discussed in the literature, including a 100-page analysis by Thomas Blecke (2004). It is used with other auxiliaries to shift the reference back in time to a moment when the event was actualized, when it was a real event, before it became de-actualized with the passage of time. With **bé**, which represents the Progressive of the Vast Present, its effect is to give this form a past reference. This combination is also used with the sense of a recent past, or an event that happened right away.

- (21) a **à dén-w tún bé à wéle baba**
 3s child-p ABS be.IPFV 3s call daddy
 ‘His children called him daddy.’
 (= *Ses enfants l’appelait papa* (French imperfect))
- b **án-w tún bé só dó jó**
 1-p shifter be.IPFV house build other
 ‘We straightway built a house.’

With **yé** (negative **má**), **tùn** produces a pluperfect reference, as in the following examples. This also applies to the suffix /-ra ~ -na/, marking the past of intransitives, as in the third example (**nàna** = **nà** + **ra**).

- (22) a **ù tun má à dón** ‘They didn’t know (it). (i.e. hadn’t realized it).’
 b **Séku tún má ò fó** ‘Seku hadn’t said that.’
 c **à tériw bée tún nàna** ‘All his friends had come.’ (**bée** = ‘all’)

The use of **tùn** with the prospective auxiliary **bé na** likewise produces a kind of conditional, by representing the possibility in the here and now rather than in the future.

- (23) a **ń tún béna à sà** ‘I’ll probably buy it/ I would buy it.’
 b **ù tún béna à ké** ‘They will probably do it/ They would do it.’

The usage of **tùn** resembles that of Evidentials in other language families (e.g. North American Algonkian, as in Proulx 1990:104-109), where an Attestive used in the present refers to the past (one can only attest in the present to that which is already past), and in the past to anterior time as in the Pluperfect. Proulx also notes that the Attestive is used with future markers (1990:108), which produce Conditionals and assertive Presents: “In Moose Cree a potential is formed with *-**pan** and a future preverb: **ta-milwa:šino:pan** ‘it would be nice’ (Ellis 1983:569) **ta-ki:-wawe:šita:pan** ‘she could fix it’ (ibid. p.651), a usage which parallels that recorded by Blecke (2004:61ff). Beside the normal Micmac

future, Proulx (Proulx 1990:107) reports one used only with the first person: **ke: eliyeyap** ‘I’ll go (willingly)’ [**ap** from ***-a:n + -pan**], which resembles Blecke’s “assertive present”.

3.5 Participles

There are three participles, a perfect participle with a suffix **-len** (**-nen** after nasals), a present participle with a suffix **-to**, and a situative participle (called “anticipatory” by Kastenzholz) with a suffix **-ta**. This is a simple ternary set of contrasts that may be diagrammed as in §3.9, below.

These participles all have usages that are typical of such participles in other languages: **mùso sìgi-len** ‘the seated woman’, **mùsow sìgi-len** ‘the seated women’; **à sègin-to** ‘coming back, on his way back’; **ké, ké-ta** ‘do, doable’ (i.e. feasible), **dún, dún-ta** ‘eat, edible’. They can also be used with full verbal effect in the subjects and predicates of finite verbs, as in the following examples from Kastenzholz (1998:112ff):

- | | | | |
|------|---|--|---|
| (24) | a | ń fà sègin-nen bé
my father return-PFT is
‘My father is back.’ | Jóliba bùgo-len bé
Joliba beat-PFT is
‘Joliba [a soccer team] has lost.’ |
| | b | Sògo jíran-to dógoyara
meat roast-IPFV be small.PFM
‘The roasting meat shrank.’ | né fli-to dón
1s err-IPFV know
‘I am in error.’ |
| | c | Sògo jíran-ta bé tàbali kàn
meat roast-SIT be table on
‘The meat for roasting is on the table.’ | ò yé í ká fò-ta yé
3s is 2s POSS say-SIT be
‘That’s for you to say.’ |

3.6 Prefixes and suffixes

There are three verbal prefixes reported by Konaré (1998:94): **la-**, **ma-**, **so-** with the following examples:

- | | | | |
|------|------------------------|---|------------------------------------|
| (25) | taa ‘to leave’ | > | la-taa ‘cause to leave’ |
| | gere ‘approach’ | > | ma-gere ‘to bring together’ |
| | bo ‘go out’ | > | so-bo ‘remove’ |

These appear to be three different causatives, but the data is insufficient to allow any conclusions to be drawn. There are quite a few derivational suffixes, forming diminutives, augmentatives, etc, one of which, **/-li/**, forms verbal nouns: **tà** ‘take’, **wári tàli** ‘the taking of the money’.

3.7 Mood

The Imperative singular uses the bare verb, with the object, if any, preceding: **nà** ‘come!’; **à tà** ‘take it!’. The plural uses the 2p pronoun followed by **yé** (the completive form of the verb ‘to be’): **á yé nà** ‘come! (2p)’; **á yé à tà** ‘take it! (2p)’.

What Kastenholz calls the “obligative” (= OBL) is likewise with a full verb, using the particles **ká** (affirmative) and **kána** (negative) as in (26):

- (26) a **ánw ká tága só sísan**
 1p OBL go house now
 ‘Let’s go home now.’
- b **í kána ò jíridenw kári**
 2s NEG.OBL those fruits pick
 ‘You’re not allowed to pick that fruit.’
- c **jón ká tóbi-li é**
 who OBL cook-NOM question
 ‘Who’s supposed to be cooking?’

The “obligative” may also be used in subordinate clauses, as in (27):

- (27) **ń bɛ à fɛ í ká nà síni**
 1s be it to 2s OBL come tomorrow
 ‘I would like you to come tomorrow.’

3.8 Negatives

As already seen (exx. 7, 4-19), negatives function as auxiliary verbs. The negative auxiliary **má** replaces the PFM auxiliary **yé**, the “preterit” marker /-ra/, and is postposed to the shifter **tùn** (see examples (22a,b)). The negative auxiliary **tɛ** replaces the demonstrative auxiliary **dòn**, the equivalent auxiliary **yé** and the IPFV auxiliary **bé** (examples (16),(17) and (18)). The negative auxiliary **mán** replaces the stative auxiliary **ka** (example (19)).

3.9 Relatives

Bambara has two kinds of relativization strategy, in neither of which is the relative clause embedded in the main clause. Kastenholz (1998:169) refers to the main strategy as a restrictive relative (examples (28a,b), because it contains essential information, whereas the second strategy, which he calls the adpositional relative, contains secondary information (example (28c)). Both involve the relativizer **mín** (s)/ **mínw** (p). In the restrictive relative this follows the relativized constituent – subject, object, or complement – in the relative clause, which precedes the main clause. Thus the literal English rendering for the second example below would be ‘hunter gun REL bought, it was expensive’ for ‘the gun which the hunter bought was expensive’. In the adpositional type, the **mín** is outside the main clause, heading the following relative clause.

- (28) a **mògo bɛ mínw nàna, òlu jàmu yé kó Jàra**
 people all REL came, they are called Jara
 ‘All the people who came are called Jara.’ (Kastenholz 1998:170)

- b **dònso yé màrifa mín sà̀n, ò sò̀ngɔ̀ tòn ká gè̀lɛ̀n**
 hunter be gun REL bought, it expensive was
 ‘The gun which the hunter bought was expensive.’ (Kastenholz 1998:170)
- c **dònso yé màrifa sà̀n, mín sò̀ngɔ̀ tòn ká gè̀lɛ̀n**
 hunter be gun bought, REL expensive was
 ‘The hunter bought a gun, which was expensive.’ (Kastenholz 1998:171)

3.10 Conclusion

There are no tense contrasts in Bambara. The verbal system of Bambara consists of three participial forms with contrasting aspects (Imperfective, Perfect, and Situative), followed by three somewhat different contrastive aspects that are found with the finite forms (Progressive, Performative, and Prospective).

In §3.10.2, the terms “Completive” and “Incomplete” have been used because the difference between the auxiliaries **bé** and **yé** appears to be lexical rather than grammatical. The suffix **-ra**, however, raises many important questions: only with this suffix does the verb immediately follow the subject without the mediation of an auxiliary, but this suffix is only found on intransitive verbs. It is, nevertheless, unquestionably a grammatical marker of aspect: its function is parallel to that of AUX **bé** (the two are in complementary distribution).

3.10.1 Participles are suffixally marked non-finite forms. (X = the position of the primary actant, and x = the position of a secondary actant)

	-to
Imperfective	<-----X- - - - - partially completed event
	-lɛ̀n
Perfect (Retrospective)	<-----x X completed event
	-ta
Situative (“Anticipatory”)	<X- - - - - potential event

Notes

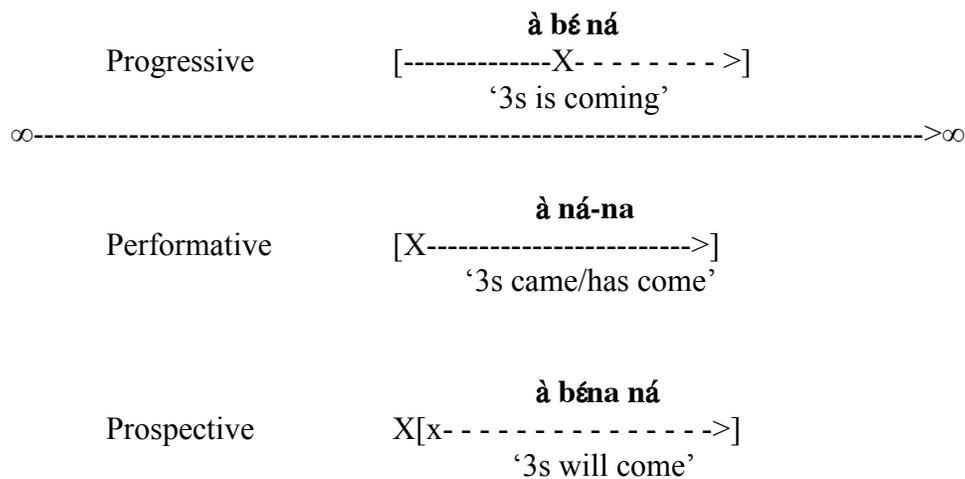
1. These are representations of Event Time only, and the contrasts are purely aspectual. There is no inherent relationship of these forms to any part of Universe Time, and consequently no representation of tense.
2. The three forms constitute a contrastive set with three cardinal positions, beginning middle, and end.

3. Typologically this same aspectual set is found elsewhere. In Swahili, for example, there are three finite aspectual forms: IPFV *anakimbia* ‘3s is running’; PFT *amekimbia* ‘3s has run; SIT *akikimbia* ‘if 3s runs’.

4. A Perfect or Retrospective is always the representation of an event seen from its result phase, which cannot exist until the event itself is complete, as in **mùso sìgi-len** ‘the seated woman’. The woman cannot be seated (= X) until she has completed the action of sitting (= x). Retrospective forms are frequently used in both functions: Sw *amekimbia* can mean either ‘3s has run’ (= X), or ‘3s ran’ (= x). French *j’ai parlé* like wise can mean either ‘I spoke’ (= x) or ‘I have spoken’ (= X).

5. Just as Retrospectives (= X) can also be used in the function of Perfectives (= x), Perfective forms may also be found used as Retrospectives, but only if the verb, by its Aktionsart (lexical aspect) is a verb of resultant state, such as *be born, die, sit, stand, fall, lie, arrive, leave*, where the resultant state cannot be avoided. *He died* means necessarily *he is dead*.

3.10.2. Intransitive finite forms⁵



Notes

1. The use of an auxiliary is a good justification for describing **à b é n á** as Progressive rather than as Imperfective. Progressives are typically formed by the use of some kind of an auxiliary element.

2. These forms are finite, and show a relationship between the representation of Event Time and that of Universe Time. As a result the Progressive represents the ongoing

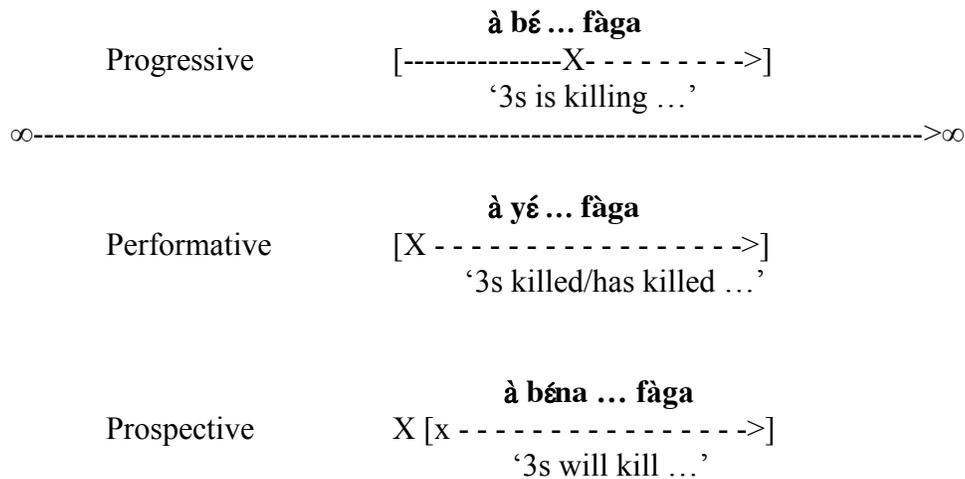
⁵The form **n á n a** is underlying **n á - r a**. Each of the three finite forms can form compounds with the shifter **t ù n**, which shifts the event represented to an earlier moment of time.

present, the Performative represents the past (time coeval with the memory), and the Prospective represents the future (time coeval with the imagination). The line representing Universe Time (the mental representation of time outside the event, which contains the event) has been added to the diagram with symbols that represent it as limitless.

3. It will be noted that the line of Universe Time is not to be found in the diagram of 3.10.1, since the participles represented there have no inherent connection to the representation of Universe Time. It may be noted, however, that all three participles are exponents of Descending Time.

The Prospective, which looks forward, is the mirror image of the Retrospective, which looks back, and consequently requires two positions, a primary (X) and a secondary (x). The latter identifies the event to which the primary subject is committed. And again it may be noted that all three aspects in the finite forms are exponents of Ascending Time.

3.10.3 Transitive finite forms



Notes

1. Because transitivity is marked syntactically by the presence of a Direct Object, symbolized by (...) in the diagram, it was felt to be appropriate to represent the transitive and intransitive forms separately, in spite of the overlap.
2. Because of the usage of the auxiliary **yé** as a Present Habitual in some dialects (see fn. 3), there is clear-cut evidence of its status as a Performative.

4

Bantu (Narrow)

(Bantoid, E. Benue-Congo)

Derek Nurse

4.1 General

This chapter differs from the others by providing, not an analysis of one language, but an overview of all (Narrow) Bantu languages. Some 500 Bantu languages are spoken by some 250 million people, a third of all Africans, in the whole sub-Saharan region south of a line from western Cameroon to southern Somalia. Communities range in size from several million down to a mere handful (Gordon 2005, van der Veen 2003). At least forty-five communities have a million speakers, and of those at least sixteen have five to ten million, Swahili being the largest with over seventy million, many of whom are bilinguals or second language speakers.

Most Bantu languages have five or seven contrastive vowels. Some have contrastive length, some not. Consonant inventories vary enormously, from large (e.g. Ilwana E701, with over forty contrastive units, including the prenasalized, to small (some northwestern languages in zones A, B, and C have just over a dozen)¹. Many contrast voiceless stops with voiced continuants. Many contrast labial, coronal, and velar, although some also have palatal, and nasals and prenasalized units occur at most places of articulation. 95% are tonal, usually with a H:L (or H:toneless) contrast.

Quantity and quality of documentation also varies widely. At one end of the scale, a reasonable description or analysis of the verb system exists for perhaps fifty languages, in the form of a book, article, or thesis. At the other end are many dozens of undescribed languages. Between the two are hundreds of languages for which the documentation ranges from a word list to an incomplete description. So for perhaps a tenth of the languages there is a description on which a reasonable analysis can be based, while for the rest we had to rely on the available data, own notes, email communication, or other less-than-perfect sources.

What follows rests on examination of 100 geographically and typologically representative languages, as are all statistical statements, except where a different database set is specified. Northern and northwestern languages (Zones A, B, C, D10-20-30, and part of H) are sometimes exceptions to the generalizations below. (See Makaa, Chapter 17).

4.2 Word Order

Bantu languages belong to Heine's (1976) Type A, having: S (AUX) V O X², where there may be two (or more) noun phrase objects (double object marking, rather than direct and indirect), and X represents adverbials, prepositions, and noun phrase constituents, including relative clauses and the genitive construction, typically following the head noun.

¹ The Bantu area is conventionally divided into fifteen geographic zones (A, B, C ... S), following Guthrie (1971), but see Maho (2003).

² The Cameroonian language Nen, with SOV, is the only known exception (Mous 2003).

- (1) Herero **má-vé-tjáŋg-ér-e ovanǎtjé ombapíra m-ondjúwó**
 PRS-3p-write-APP-FV children letter in-house
 ‘They are writing a letter to the children in the house.’

Although the canonical word order is SVO, considerable word order variation is possible for pragmatic purposes. Favoured positions for focus are sentence-initial and post-verbal, as in Tumbuka where the normal order is S V O (BEN) O (goal) ADV:

- (2) Tumbuka a **ngô:ma ti-zamu-limilira namachê:ro**
 maize 1p-FUT-weed tomorrow
 ‘Maize we will weed tomorrow.’
- b **wa-ka-wa-pása mabû:ku wâ:na**
 3p-past-3p-give books children
 ‘They gave books to the children.’

Bearth (2003:127) claims: “The widespread tendency in Bantu languages is to assign ... the positions next to the verb on account of a hierarchy of parameters defined..in terms of (i) animacy of the referent (human > animate > inanimate), (ii) semantic role relationship (beneficiary > goal > patient > locative), (iii) participant category (first > second > third person), iv) number (plural > singular)”³. This is true of noun phrases following the verb, and their mirror image, object prefixes preceding it (see Beaudoin-Lietz et al. (2004)).

- (3) Tswana a **k’i-tl’a-kw’ál-él-él-a gwana bats’álí lōkw’áló**
 1s-FUT-write-APP-APP-FV child parents letter
 ‘I’ll write a letter to the parents for the child.’
- b **k’i-tl’a-lō-ba-mō-kw’ál-él-él-a**
 1s-FUT-it-them-him-write-APP-APP-FV
 ‘I’ll write it to them for him.’

Neither yes/no nor *wh*-questions tend to deviate from SVO order. Yes/no questions are indicated either by a question marker at the start or end of the sentence, and/or by tone. The *wh*-word typically retains the position of the element replaced, at least for non-subjects: subjects tend to be questioned by cleft structures.

- (4) Tumbuka a **Walŋ:mi w-a-luta ku-mû:nda**
 farmers 3p-past-go to-field
 ‘The farmers went to the field.’
- b **Walŋ:mi w-a-lutâ:-nkhu?**
 farmers 3p-past-go-where
 ‘Where have farmers gone?’

³ We have reason to think that, while these tendencies are ‘widespread’, they are not necessarily universal in Bantu.

- c **Ni njâ:ni w-a-luta ku-mô:nda**
 is who (that) 3p-past-go to..?
 ‘Who went to-field?’ or:
- d **Ku-mô:nda kw-a-luta njâ:ni**
 to-field there-past-go who?
 ‘Who went?’

The Tumbuka statement and question differ by the tone on the last syllable and the *q*-word, **kási**.

- e **Mbô:zi zi-ka-duka pa-chiphô:pha**
 goats 3p-past-jump at-wall
 ‘The goats jumped over the wall.’
- f **Kási, mbô:zi zi-ka-duka pa-chiphô:phá**
 ‘Did goats jump over-wall?’

4.3 Verb structure

It is impossible to deal with all the structures of 500 languages, so this section treats what is typical. Two all-inflectional structures are very common, and they differ by the position of the negative markers. The first is exemplified in (5), the second in (10):

- (5) PreSM - SM - formative - OM - root - EXT - F - PostF
 PreSM - SM - NEG₂ - formative - OM - root - EXT - F - PostF

Lucazi **mikanda i-ka-tw-a-ká-ci-va-sónek-il-ile-ho**
 letters PreSM-PreSM-SM-form₁-form₂-form₃-OM-root-EXT-F-PostF
 letters REL-NEG-we-past-itive-mood-them-write-APP-F-then
 ‘The letters which we had not just gone to write to them then’

The only two obligatory constituents are root and final (F), which co-occur in the imperative (together with a H on the FV). Several morphemes may co-occur at each of PreSM, formative, object, extension, and PostF, typically in a canonical order. Always or nearly always encoded in the inflected verb are: subject, tense, aspect, mood, valency, and negation. Less often, rarely, or not encoded in the verb are: relative markers, focus, pronominal objects, and other categories.

PreSM: Here are often included the markers for non-subject relative (‘person whom we have seen’) and NEG₁, the latter encoded by **-ka-** (60)⁴, **-ta-** (20), **-ti-** (17), **-ki-** (16), numbers being figures out of 160 sample languages. Meeussen (1967:108) says these are low toned, with the vowel of the next syllable (SM) being high. All other morphemes at PreSM are local and of much lower distribution, the commonest being **ni-** (from the copula, most often marking focus), and **na-/ne-** (various, from ‘and, with’).

⁴ The numbers refer to the 160 languages used as a data base. Thus, of the 160 languages looked at, 60 had this morpheme in this position.

SM: Subject concord is usually obligatory and encoded at SM in the verb structure, whether the subject noun is present or not. Person markers are typically: 1s **n(i)-**, 2s **u-**, 3s (subjunctive and others) **á-**, 3s (indicative) **ú-**, 1p **tu-**, 2p **mu-**, 3p **bá-**. Participants are L, others have H, (except after PreSM L, when all will be H). Class concords, not shown here, are also H.

NEG₂: **-tí-** (50), **-tá-** (47), **-ca-** (30), **-ka-** (27). Again, numbers are figures out of the 160 sample languages.

Formative: some languages allow only one morpheme here, some allow two, the second typically marking consecutive, itive or ventive in some languages. A very few languages allow more than two. Common morphemes are: **-a-** (86%) (**-á-** H ‘near past’, **-a-** L ‘non-near past’); **-ka-** (70%) L ‘itive, narrative, past’, L/H ‘future’); \emptyset (50%) ‘general present, conjunctive, narrative, participial’; **-ki-** (48%) ‘persistive’ (H), ‘participial’; **-la(a)-** mainly ‘future’. **Ka** and **kí** typically come last in languages which allow two or more morphemes.

OM: OMs are as SMs in shape, except 2s **-ku-**, 3s **-mu-**. 1-2-3s are L, plural persons and class OMs are H. Some languages (e.g. Lingala) allow no OMs, some allow one (e.g. Swahili), some (e.g. Haya) allow two, some (e.g. Chaga) allow three, and up to five, even six, may be allowed, though not common, in a few languages (Beaudoin-Lietz et al. (2004)). Pronominal objects occur at PostFV, or post verbally, in some languages. Some languages allow pre-stem OMs and PostFV OMs, others allow only one or the other. (Languages allowing multiple OMs are all in the northeast of the Bantu area.)

(6) Mboshi **pé wa bu** ‘Give him it.’ (both OMs are post-verbal)

Swahili (1) **ndiyo, ni-li-m-pa** ‘Yes, I gave (it) him.’ (‘it’ implicit, not explicit)

Haya (2) **kat’ á-ka-ki-mú-ha** ‘Kato gave him it.’ (it-him)

Chaga (3) **n-á-lé-í-kú-m-zrúm-a** ‘He sent him there with it.’ (it-there-him)

Rwanda (6)

a-ra-na-ha-ki-zi-ba-ku-n-som-eesh-eesh-er-er-eza

3s-FOC-also-there-it-them-3p-2s-1s-read-CAU-CAU-APP-APP-IPFV

‘The woman is also making them read it (book) with them (glasses) to you for me there (in the house).’

EXT: Extensions change and typically increase valency. The most widespread extensions are: causative (***-i-**, **-ici-**), applicative (encompassing various functions) **-il-**, impositive **-ik-**, neuter/decausative **-ik-**, positional **-am-**, reciprocal **-an-**, repetitive/pluractional **-a(n)g-**, extensive **-al-**, tentative **-at-**, reversive **-ul-**, **-uk-**, passive **-u-/ibu-** (shapes from Schadeberg 2003). Causative, applicative, reciprocal, passive usually occur in that order.

F(V): Certain finals and final vowels are widespread: **-a** (tonally various) ‘neutral’, **-é** ‘subjunctive’, **-ile** (tonally various) probably originally ‘perfect’, today ‘perfect’ and various

pasts, **-a(n)g-a** IPFV (in origin this is the same **-ang-** as the extension). Two others are more restricted: **-i** (26%) various, including perfect and near past, and a vowel copy suffix (11%) ‘perfect, near past’. Percentages are of the 160 sample languages.

PostF(V): Only one morpheme is common here, **-ni** or a similar form, which occurs widely in the plural imperative, and less widely in other first and second plural forms. Others are local: OMs (of uncertain status – suffix, clitic, independent), locatives, negatives, and a few scattered others.

- (7) Lunda a **tal-enu-ku**
 look-plural-there
 stem-FV-PostFV
 ‘Look there!’
- b **bayi mu-tal-i-ku-ku**
 NEG 2p-look-SBJ-there-NEG
 ‘Don’t look there!’
- c **n-a-mw-inká-wu**
 1s-past-3s-give-it
 ‘I gave him/her it.’
- Mituku **tu-Ø-bund-íye-bí**
 1p-Ø-catch-past-yesterday
 ‘We caught yesterday.’

4.4 Tense, aspect (Nurse 2008)

Tense is most often encoded at formative, less often at F or before the SM. Bantu languages typically have multiple past and future reference: 83% of the database languages have between two and five discrete past tenses (40% have two, 32% have three, 17% have one, 10% have four, 1% have five), and 87% have one to three futures (46% have just one, 25% have two, 16% have three, 10% have none (i.e. future and present were neutralized as non-past), 3% have four or five. In a language with two pasts, the nearest refers to hodiernal situations and the other to beyond today, in a language with three pasts, the distinction is today versus yesterday (or a few days before) versus remote, and languages with a four way distinction add a ‘just past’ to what three way languages have. Futures are usually the mirror image of pasts, except they sometimes add a modal dimension of uncertainty. Tense reference is predominantly relative, not absolute. Past and future reference is not necessarily symmetrical, that is, there are not necessarily equal numbers of past and future tenses in a language.

Aspect seems to have been originally marked at F, but today also appears at formative: perfective, imperfective, progressive, habitual, perfect, and persistive are the commonest aspects.

Some of these notions are illustrated via Bukusu (E31c), spoken by some 600,000 people in Kenya’s Western Province (a variety of Luyia, with a total of over four million speakers). The analysis summarized in Table 4.1 is based on data from several, mostly unpublished, sources.

Most sources for Bukusu agreed on four pasts (the only disagreement was whether or not P₁ **aaxa** was in fact a tense) and three futures. In a neutral situation, P₁, P₂, P₃, P₄ refer to ‘very

recently/just, today, a short time before today, remote’, respectively, F₁, F₂, F₃ to ‘today, beyond today, remote’, respectively. P₁/P₂/F₁ are fixed in meaning, the last two being hodiernal, including last night and tomorrow morning, but the others are flexible in reference, depending on the circumstances and the speaker’s attitude to the circumstances. Thus, for example, **xwaalímile** ‘We bought’ is P₃ but can be used of a few days ago, or last month, or last year. A person discussing events of twenty years ago could use that form if the events were still vivid in the memory.

Morphologically, Bukusu illustrates nicely some features found widely across Bantu. Past Perfectives involve various combinations of **-a-** (short and long) and **-ile**. As other Lacustrine languages, two futures are distinguished by **-la-** (nearer) versus **-li-**. At least two futures involve FV **-e**, the subjunctive marker, both referring to non-factuality. Pre-stem **-Ø-** refers to the vast present.

Grammaticalised aspects are PFV, IPFV, PRG, PER, and PFT, there being no discrete HAB. Bukusu, as other Lacustrine languages, has two perfects – both translate as ‘have/had verbed’ but one refers to situations nearer the moment of reference, the other to more remote situations. Bukusu also exemplifies nicely possible aspectual contrasts in the present: ‘we verb (in general), we verb (regularly), we are verbing’.

Again, Bukusu illustrates some common Bantu strategies for encoding aspects. PFV is relatively unmarked; IPFV has **-ang** at F; Present Progressive consists of ‘be’ (**li**), locative, and verbal noun (‘we are at verbing’), while tensed Progressives mark tense on another form of ‘be’ (**ba**), plus verbal noun; Persistent has a reflex of ***ki**, preceded by tensed forms of ‘be’ in the non-present; segmentally, the two Perfects involve combinations of pre-stem **-a-** and F **-ile**.

Finally, it can be seen that tone plays an important role in tense-aspect distinctions in Bukusu. Tone varies according to context, so Remote PFT ‘We have cultivated’, **xw-áa-lima** (pre-pause declarative), **xw-áa-líma** (before a complement), **xw-áá-límá** (pre-pause question). It varies according to category: **xw-á-lima** P₄, **xw-áa-lima** PFT, **xw-aa-lim-a** NAR. It also has a syntactic role: the contrast between declarative and question above, and **a-lá-ca** ‘She will definitely go’ versus **a-la-ca** ‘She may go’ (L. Kitembe, p.c.). Tones shown in the matrix which follows are those in pre-pausal declarative phonetic forms.

Table 4.1 E31c Lu-bukusu

	Perfective	Imperfective -ang-	Progressive (‘be’+) xu-	Persistent (‘be’+)-sii-	Perfect
P ₄ -á-	xw-a-kul-á ‘we bought’	xw-á-kul-aang-a ‘we used to buy, were buying’		xw-á-b-áxw-sii-kul-a ‘we were still buying, still used to buy’	xw-á-b-áxw-áa-kul-a ‘we had bought’ or P ₃ and P ₂ below
P ₃ -áá... -iló	xw-aa-kul-ile ‘we bought’	xw-aa-kul-il-aang-e ‘we were buying’	xw-aa-b-áá-xu-kul-a ‘we were buying’	xw-aa-b-áá-xu-sii-kul-a ‘we were still buying, still used to buy’	xw-aa-b-áá-xw-aa-kul-ile ‘we had bought’
P ₂ -iló	xu-kul-ile ‘we bought’	xu-kul-il-aang-e ‘we were buying’	xu-b-eeló xu-kul-a ‘we were buying’	xu-b-eeló xu-sii-kul-a ‘we were still buying, still used to buy’	xu-b-eeló xw-aa-kul-ile ‘we had bought’
P ₁ -aaxa-	xw-aaxa-kul-a ‘we just bought’	xw-aaxa-kul-aang-a ‘we just stopped buying’	xw-áá-xá-b-á xu-kul-a ‘we were just buying’	xw-áá-xá-b-á xu-sii-kul-a ‘we were still buying, just now bought’	xw-aaxa-b-a xw-aa-kul-ile ‘we have/had just bought’
-Ø-	xu-Ø-kul-a ‘we buy’ (in general)	xu-Ø-kul-aang-a ‘we buy regularly’ xu-la-kul-aang-a ‘we have been buying’	xu-í-xó xu-kul-a ‘we are buying’	xu-sii-kul-a ‘we still buy, are still buying’	xw-aa-kul-ile ‘we have bought (recently)’ xw-áa-kul-a ‘we have bought (remoter)’
F ₁ -la- káne + SBJ	xu-la-kul-a ‘we will buy’ káne xú-kul-e ‘we will buy’ (less definite for some)	xu-lá-b-á xu-la-kul-aang-a ‘we will have been buying’ káne xú-b-é xu-la-kul-aang-a ‘we will have been buying’	xu-lá-b-á xu-kul-a ‘we will be in the process of buying’ káne xú-b-é xu-kul-a ‘we will be in the process of buying’	xu-lá-b-á xu-sii-kul-a ‘we will still be buying’ káne xú-b-é xu-sii-kul-a ‘we will still be buying’	xu-la-b-a xw-aa-kul-ile ‘we will have bought’ káne xú-b-é xw-aa-kul-ile ‘we will have bought’
F ₂ -xa- ...-e	xu-xa-kul-e ‘we will buy’	xu-xa-kul-aang-e ‘we will have been buying’	xu-xá-b-é xu-kul-a ‘we will be in the process of buying’	xu-xá-b-é xu-sii-kul-a ‘we will still be buying’	xu-xá-b-é xw-aa-kul-ile ‘we will have bought (recently)’ xu-xá-b-é xw-áa-kul-a ‘we will have bought (remoter)’
F ₃ -lí-	xu-li-kul-a ‘we will buy’	xu-li-kul-aang-a ‘we will be buying, we will buy’ (HABITUAL)	xu-li-b-á xu-kul-a ‘we will be in the process of buying’	xu-li-b-á xu-sii-kul-a ‘we will still be buying’	xu-li-b-á xw-áa-kul-a ‘we will have bought’

- (10) Ha a. **nti-tw-aá-koz-e**
NEG₁-1p-past-work-PFV
'We didn't work' but
- b. **abantu ba-ta-á-koz-e**
3p-NEG₂-past-work-PFV
'People who didn't work'
- Langi a. **si-tw-á-boká**
NEG-1p-past-dig
'We didn't dig'
- b. **m̩:nt̩ mwene si-a-seka**
...who NEG-past-laugh
'Person who didn't laugh'
- Punu a. **tu-sá-ma-díbiga**
1p-NEG-past-close
'We didn't close'
- b. **tu-gó-díbiga**
1p-NEG-close
'We won't close'
- Kituba a. **yánda ké kwikíka ngé vé**
he HAB believe you NEG
'He doesn't believe you.'
- b. **ku-dia dimpa ve**
INF-eat bread NEG
'Don't eat bread!'
- Congo a. **ka-tu-tond-i-ko**
NEG-1p-like-FV-NEG
'We don't like.'
- b. **ka-lu-tond-i-ko**
NEG-2p-like-FV-NEG
'Don't like!'
- c. **ka-lu-a-tond-a-ko**
NEG-2p-a-like-FV-NEG
'That you shouldn't like' (plural subjunctive)

Venda	a	a-ri-rém-i NEG-1p-cut-NEG 'We don't cut'
	b	u-si-rém-e 2s-NEG-cut-SBJ 'Don't cut'
	c	rí-sa-rém-i 1p-NEG-cut-NEG 'if we don't cut'

The examples here are included for the sake of completeness. It should be emphasized that the Ha and Venda cases are more typical of the general picture (see PreSM and NEG₂, above, for morphemes widely involved).

4.7 Auxiliaries

It is impossible to list all the active auxiliaries or the formatives deriving from auxiliaries that occur in 100, or 500 languages. Considering both current auxiliaries and formatives definitely or reasonably derivable from auxiliaries, certain are widespread, with their proto-typical shape, they are: 'be' (**-li** 'be (at)' or **-ba** 'be, become, live', less often **-ikala** 'be, live, sit, etc' and others), 'have' (often = 'be with', typically involving **-na**), 'come' (often **-ija**), 'go', 'want' (**-caka**, **-penda**), 'finish' (**-mala**, **-sila**). Much less widespread are 'do' and 'say'. Their typical functions are:

'be (at) verbal noun', **-li** (-LOC) **-ku-** = PRG (Bastin 1989a, 1989b)

'(be) with' = non-past, future, PRG, past, 'not yet' = 'be still', NAR

'be' appears very widely as the (first) auxiliary verb in two-word compounds, where it is typically inflected for tense.

'come', most often future, less often past

'go' and 'want', future

'finish', perfect, completive, 'have just'

Also common are derivatives of the particle **nga** 'as, like', predominantly as conditionals, and of **na**, with various meanings. As Heine and Kuteva (2002) point out, it is sometimes hard to distinguish the conjunction **na** 'and, with' from 'have = be with'.

5

Bijago (Central, (West) Atlantic)

Sarah Rose

5.1 General

Bijago (aka Bidyogo, Bijogo) shows the same problematic relationship to other Atlantic languages as Atlantic does to Niger-Congo. As do most authors (e.g., Williamson 1989:21, Wilson 1989:90, Williamson & Blench 2000:21), Segerer (2002:6) considers Bijago its own sub-branch of the Atlantic group, on a geneological par with the Northern and Southern sub-groups¹. Recent SIL estimates (Gordon 2005) placed the number of speakers at approximately 24,500 people, Lewis (2009) at 32,400, spread throughout a large number of islands which make up the Bijago Archipelago off the West Coast of Guinea Bissau.

The dialect described by Segerer (2002)³ and discussed here is Kagbaaga, spoken on the large centrally-located island of Bubaque. Others dialects include Kapaki, Kajoko and Kamona. With the exception of the latter, these are mutually intelligible. Segerer uses the spelling Bijogo in his 2002 monograph; I follow Childs (2003:220, Appendix 2) in using Bijago, the name also used by SIL⁴.



Map source: World Factbook (CIA)

¹ Segerer acknowledges that Bijago's position in the classification system has been enigmatic, although based on his recent investigations, he considers Bijago "definitely Atlantic. The lexicon makes it closer to the northern branch, especially the Bak languages, while some grammatical points show resemblances with the southern branch", but adds that this last point "needs investigation" (Segerer: p. c.).

² The Joshua Project says 33,000 (www.joshuaproject.net).

³ Abbreviations unique to this chapter: CPT 'centripetal' (= 'movement toward'), CTF 'centrifugal' (= 'movement away from'), SV ("marqueur séquentiel verbal"-- indicates a sequence of actions), PASN 'passé neutre'. The two most common abbreviations which Segerer uses are explained as follows: (1) ACC *accompli*. This is an aspectual term whose meaning may be translated as 'perfective' or 'accomplished'. With certain verbs, the *accompli* could include a Factative meaning (as in Welmers (1973)), or in some cases, a resultative perfect. Generally, wherever this abbreviation appears, I gloss Segerer's ACC as PFV (perfective). (2) INAC *inaccompli*. This term is the opposing aspectual pole whose meaning may be translated as 'imperfective' or 'not accomplished'. Wherever this abbreviation appears, I have glossed Segerer's INAC as IPFV (imperfective). The majority of other abbreviations are class/agreement markers (as the upper-case E- in example (1)). See also fn.5.

⁴ In the archipelago itself, Portuguese speakers use Bijago for either the people, the language, or the islands themselves. Creole speakers may say Bijogo or even Bujugu (Segerer, p.c.).

Bijago is a seven vowel language (with vowel harmony, which appears to work from right to left). The general syllabic structure is (C)V(N)(C), with CV the most frequent (others V, VC, CV(N)C, N). The prosodic system is accent- or stress-, rather than tone-based.

Syntactically, there are several factors which Bijago shares with other Atlantic languages and with the Bantu family. Of all Atlantic languages, Bijago is considered to be the most Bantu-like, or at least, to possess a preponderance of Bantu-like typological features (Seegerer 2002:283). These include an extensive noun-class system (Bijago has 14 noun classes)⁵, predominately CVC verbal root structure, a plethora of post-root derivational extensions (of either -V or -VC structure), personal pronominal objects located within the verbal structure, and similar subject pronoun markers.

5.2 Word Order

The default word order in Bijago is S AUX V O X:

- (1) **e-bootji** **ε-bak** **e-we**
 E-dog E.PFV(agreement.aspect)-catch E-goat
 ‘le chien a attrapé la chèvre’ [‘The dog caught/has caught the goat.’] (2002:77)⁶

In the case of multiple objects which follow the verb, the IO is located closer to the verb than the DO (multiple internal pronominal arguments are prohibited).

- (2) **na-ɬapak-ε** **ɔ-g** **ŋu-mpɛs**
 1s.PFV-borrow-PFV 3s-pro (lui) [‘from him’] ŋO-money
 ‘je lui ai emprunté de l’argent’ [‘I borrowed money from him.’] (2002:77)

First and second-person personal pronominal objects are located within the verb (with others usually external)⁷.

- (3) a **ɔ-na-kpɔnak-ε**
 3s.PFV-1s.OBJ-call (from afar)-PFV
 ‘Il m’a appelé’ [‘He called me.’] (2002:149)
- b **n(a)-anti-nian** / **ni-nian** **ya-g**
 2s.PFV-1p.OBJ-help / 2s.PFV-help YA-pro (les) [‘them’]
 ‘aidez-nous!’ [‘Help us!’] / ‘aidez-les!’ [‘Help them!’] (2002:149)

⁵ The infinitive is formed from the verbal root, preceded by the class prefix **ŋo-** (subject to vowel harmony): thus-**rob** ‘planter’ [‘to plant’] > **ŋo-rob** ‘fait de planter’ [‘the act of planting’] (Seegerer 2002:144). Since most citations are from Seegerer, I generally provide only date and page numbers.

⁶ I generally use Seegerer’s glossing conventions, where the first element is either a person or class marker (the latter represented by upper-case letter(s) E-, NV, ŋO-, etc. Person markers we have glossed as 1, 2, or 3. The verb shows conjoined agreement and aspect marking. With very few exceptions, this agreement is obligatory. (Verbs may be ‘double marked’ aspectually, both on the SM and at suffix (3a)). Because his work is in French, I have supplied translations.

⁷ There are some exceptions: the morpheme **-mo-**, the referent of the O-class, can be incorporated (see Seegerer (2002:184,185) for other examples).

- c **ni-ria** **mɔ-katɔ** / **ni-ria** **mɔ-g**
 1s.IPFV-take MO-fish / 1s.IPFV-take MO-pro (les) [‘them’]
 ‘je prends les poissons’ [‘I catch/am catching fish.’]
 ‘je les prends’ [‘I catch them’] (2002:73)

Adjectives, numerals and demonstratives always follow their head nouns.⁸ Relative constructions, both subject (*qui* ‘who’) and object (*que* ‘that’), are regularly marked by a post-posed relative particle **-ɔ**:

- (4) **o-gude** **ɔ-kpɛ-ɔ**
 3s-man 3s.PFV-die-REL
 ‘l’homme qui est mort’ [‘The man who died/is dead.’] (2002:180)

Compare the construction without the relative: **o-gude ɔ-kpɛ** ‘un homme est mort’ [‘A man is dead.’]

In the following example, the relative marker causes the stem-final nasal to be geminated:

- (5) **i-sɛi-na-jɔŋŋ-ɔ**
 E-cow E.IPFV-1sg.OBJ-look-REL
 ‘la vache qui me regarde’ [‘The cow who is looking at me.’] (2002:182)

Generally, adverbs occur sentence-final, although some adverbial items show a certain amount of positional flexibility:

- (6) **ɔ-ria** **kɔ-tɛŋ** **ka-nkoya**
 3s.PFV-take/eat KO-meat KA-morning
 ‘il a mangé de la viande ce matin’ [‘He ate meat this morning.’] (2002:70)

***ɔ-ria ka-nkoya kɔ-tɛŋ** [* ‘He ate this morning meat.’] (2002:70)

ne-enɔŋ e-nobo ɛ-ɛrɛm-e ‘hier il a plu’ [‘Yesterday, it rained.’]

e-nobo ɛ-ɛrɛm-e ne-enɔŋ ‘il a plu hier’ [‘It rained yesterday.’] (2002:69)

Depending on the type, questions may be morphologically unmarked (i.e., indistinguishable from assertive sentences), or may involve question particles such as the invariable, independent, pre-posed question particle **ade** (7a). *What*-questions use a post-posed particle (**-ɔ** or **-ŋɔ**) (7b). Other types of *wh*-questions involve various types of post-posed question words (7c).

⁸ Although Heine (1976) identifies type B as the dominant typology of the Atlantic region, Bijago has several characteristics which seem more A- than B-like. Regrettably, many features of Bijago, such as the varying positions of the A markers vis-à-vis the verb, make it difficult to make a definitive judgment about headedness, a critical factor in making a judgment as to type. Heine considers the A type to have been original, with B a development away (ibid:61). See also Creissels (2000:250ff) on the basic word order types in Heine (1976).

- (7) a **ade Pedro ɔ-tupk-ak Antonio?**
 ‘Est-ce que Pedro a frappé Antonio?’
 [‘Did Pedro hit Antonio?’] (2002:80)
- b **mi-ni ɲɔ** ‘qu-est-ce que tu bois?’
 [‘What are you drinking?’ Lit: ‘You are drinking what?’] (2002:81)
- c **m-ba-da ke** ? ‘quand viendras-tu?’ [‘When will you come?’] (2002:80)

5.3 Verb structure

Bijago is an aspect-based language, based on a binary aspectual opposition (*accompli* (= PFV) vs. *inaccompli* (= IPFV)). A minimal Bijago verb consists of three obligatory elements: a subject marker (position 3 in template in example (8) below), a following or fused aspect marker (position 4 in template), and a verbal root (position 9 in the template). Using the first person singular as an example, these alternations may be briefly illustrated as follows:

Table 5.1 Binary aspectual marking at SM in Bijago

ACCOMPLI (= PERFECTIVE)	INACCOMPLI (= IMPERFECTIVE)
ɲ.ɔ-dɔ 1s.PFV-aller [‘go’] ‘j’ai marché’ [‘I went’]	ɲ.i-dɔ 1s.IPFV-aller [‘go’] ‘je vais’ [‘I go/am going’]
ɲ.ɛ-rɛsak 1s.PFV-acheter [‘buy’] ‘J’ai acheté’ [‘I bought’]	ɲ.i-ɛs 1s.IPFV-balayer [‘sweep’] ‘je balaie’ [‘I sweep/am sweeping’]
ɲ.o-oka 1s.PFV-être assis [‘be seated’] ‘je me suis mis...’ [‘I sat/located myself’]	ɲ.i-ɬoj 1s.IPFV-cuisiner [‘cook’] ‘je cuis’ [‘I cook/am cooking’]
ɲ.a-da 1s.PFV-venir [‘come’] ‘je suis venu’ [‘I came’]	ɲ.i-da 1s.IPFV-venir [‘come’] ‘je viens’ [‘I come/am coming’]

Seeger identifies 12 positions in the Bijago verbal structure (2002:269). As mentioned above, three of these positions are obligatory: position 3 (the class-person marker), position 4 (the aspectual marker) and position 9 (the verbal root). Positions 5, 6 and 7 cannot be occupied simultaneously. The general order in which the various morphemes may appear is as follows:

- (8) 1 2 3,4 5 6 7 8 9 10 a,b,c,d 11 12
 (NEGS) (FOC) SM.ASP (A) (A) (A) (OM) ROOT (EXT) (A) (REL)

At 1: At position 1, there are two possibilities:

(25)	9	10a	10b	10c	10d
	ROOT	-ok	-at	-an	-i
		-ak/Vk			-a
					-am

-ok is a valence-reducing suffix ('middle'), according to Segerer etymologically from a verbal root **-ok** 'être là, se trouver, y avoir' ['be there, find oneself'] (2002:211,226). Its use focuses on the agent of the process (2002:225): **raŋ** 'hang' (transitive) > **raŋ-ok** 'hang (self)'/ 'be hanging' (intransitive/middle). Verbs derived using this suffix are generally statives or intransitives.

-ak ~ -Vk is a suffix which focuses on the result of a process. This morpheme has aspectual value, regularly indicating, either alone or in concert with aspectual marking on the SM, *accompli* (perfective or, perhaps, resultative perfect. I prefer the latter and have glossed this morpheme as PFT). See Segerer (2002:222) for details of how this suffix interacts with the aspectual marking on the SM.

(26)	ŋ.i-kat	nɔ-ɔgo	/	ŋ.a-kat-ak	nɔ-ɔgo
	1s.IPFV-throw	NV-stone	/	1s.PFV-throw-PFT	NV-stone
	'je lance une pierre'		/	'j'ai lancé une pierre'	(2002:222)
	['I throw/am throwing a stone.']		/	['I threw/have thrown a stone.']	
	ŋ.i-bit	Luis poŋ	/	ŋ.i-bit-ak	Luis poŋ
	1s.IPFV-ask	Luis pain	/	1s.ask-PFT	Luis bread
	'je demande du pain à Luis'		/	'j'ai demandé du pain à Luis'	
	['I ask Luis for some bread.']		/	['I asked Luis for some bread.']	

-at is an instrumental. An instrumental may also be formed analytically, using preposition **ta** 'with' (both possibly of identical origin (2002:226)). Consequently, the sentence 'The knife gets/is sharpened with a stone' may be expressed in the following ways:

(28)	a	ni-mɛs	ŋ.i-dɛndɔk-at	nɔ-ɔgo
		NV-knife	NV.IPFV-be sharpened-INST	NV-stone
		'un couteau s'aiguise avec une pierre'		
		['The knife is sharpened/gets sharpened with a stone.']		
	b	ni-mɛs	ŋ.i-dɛndɔk	ta nɔ-ɔgo
		NV-knife	NV.IPFV-be sharpened	'with' NV-stone
		'un couteau s'aiguise avec une pierre' (2002:219)		
		['The knife is sharpened/gets sharpened with a stone.']		

-an is an applicative. Again, this morpheme is possibly ultimately from the same source as preposition **an** 'to', 'toward' (2002:226).

(29)	ŋ.a-an-rɛsɛk-an	mɔ-bɛ
	1s.PFV-2sOBJ-buy-APP	MO-plate
	'j'ai acheté des assiettes pour toi' ['I (have) bought plates for you.'] (2002:254)	

-i is a causative. For the source of this morpheme, see Segerer (2002:226):

- (30) **rak** ‘dance’ > **rak-i** ‘make dance’
ɲand-ɔk ‘be heavy’ > **ɲand-ɔk-i** ‘make heavy’
soɥ-ɔk ‘be awake(ned)’ > **soɥ-ɔk-i** ‘wake s.o. up’ (2002:217).

-a is a deictic-type directional suffix called *centripète* (‘centripetal’) (CTP) by Segerer. The meaning is motion toward something, or location nearby: **ɲuk** ‘enter’ > **ɲuk-a** ‘enter (into something, as a house)’

-am is a directional suffix called *centrifuge* ‘centrifugal’ (CTF) by Segerer. It indicates motion away, or location at a distance. The following examples indicate the two directional affixes (for others, and other meanings, see Segerer (2002:213)).

- (31) a **oton** ‘arriver’ **oton-a** ‘arriver (ici)’[‘arrive here’]
oton-am ‘arriver (là)’[‘arrive there’]
- b **biɥ** ‘demander’ **biɥ-a** ‘venir demander’[‘come to ask’]
biɥ-am ‘aller demander’ [‘go to ask’]

At 11: There are three possibilities at final (or, if relative **-ɔ** appears, at penultimate): 1. perfective, marked by **-ɛ**; 2. imperfective, marked by **-i**; 3. **-ɛn** (the *passé révolu*) with past value (only with the *accompli* (2002:242)). I have analysed this as a marker of perfect aspect.

- (32) Imperfective (*inaccompli*) **-i** i-booɥi i-tonɥ-i ‘The dogs are jumping.’
Perfective (*accompli*) **-ɛ** i-booɥi i-tonɥ-ɛ ‘The dogs jumped.’
Perfect (*accompli*) **-ɛn** ɲo-oɥak-ɛn ɲɔkato ‘I have scaled the fish.’

At 12: **-ɔ** relativiser ‘which’, ‘who’, ‘that’ (2002:183).

- (33) e-we i-ba-na-kpɛ-ɔ uraane
E-goat E.IPFV-virtuel-1sOBJ¹²-kill-**which** tomorrow
‘la chèvre **que** je vais tuer demain’[‘The goat will-I kill-**which** tomorrow’]

5.4 Multiple verb constructions

These types of predication involve more than one verb. Only the first verb (in a string of a hypothetically unlimited number of verbs, all with the same subject) is inflected. Each following verb in the string bears the marker **#n-** to indicate its sequential status (=SV) and can take an object or other complement as required:

¹² Segerer notes that the subject of the subordinate clause is syntactically and morphologically marked as an object. For more on relative clauses and their syntactic and morphological particulars, see (2003:183ff).

- (34) **ɲ.a-ʈangɔk** **an nɛ-mɛda** **n-dima**
 1s.PFV-stumble on NV-cord **SV-fall**
 ‘j’ai trébuché sur la corde **et** je suis tombé’
 [‘I stumbled over the cord (**and** I) fell down.’] (2002:271)

A second type of predication is like the first, but involves only two verbs, the second of which is regularly (always?) a stative (‘be X’). As above, the inflection appears on the first verb, the sequential marker on the second.

- (35) a. **ɲ-ɛmm-odoŋ** **n-dubaŋ**
 1s-PFT-do again **SV-be sick**
 ‘Je suis retombé malade’ [‘I fell sick again.’] (2002:272)
- b. **ɛ-man** **ɛ-de** **n-kpontok**
 E-rice E-PFV- finish **SV-be harvested**
 ‘le riz est déjà récolté’ (2002:273)
 [‘The rice is /has already been harvested.’]

The next examples involve essentially a main verb plus an infinitive. In the a. examples, there is a preposition, nearly always **ta** ‘de’ [‘of’, ‘concerning’, perhaps ‘to’] between the two verbs. In the b. examples, the ‘plain’ infinitive (with class marker **ŋO**) appears.

- (36) a **ɲ.i-boj** **ta** **n-dɔ**
 1s.IPFV-be able to **ŋ-go**
 ‘Je peux partir’ [‘I am able to go.’/ ‘I can go.’] (2002:274)
- i-ba-bajɔk** **ta (ŋ-)ɛrɛm**
 E.IPFV-‘virtuel’-last to **ŋ-rain**
 ‘il va pleuvoir longtemps’ [‘It is going to rain for a long time.’] (2002:275)
- ɛ-ntanke** **ɛ-deeni** **ta** **ŋ-dɔ**
 E-turtle E.PFV-do slowly to **ŋ-go**
 ‘la tortue va lentement’ [‘The turtle goes/is going slowly.’] (2002:31)
- b **m.i-ani** **ŋɔ-kɛŋɛ**
 2s.IPFV-know **ŋO-trace/write**
 ‘tu sais écrire’ [‘You know (how) to write.’] (2002:278)
- ɲ.i-dik-ak** **ŋɔ-nakam** **eti** **ɛ-ara**
 1s-like-PFT **ŋO-climb** on palms
 ‘j’aime grimper au palmier’ [‘I like to climb palms.’] (2002:278)

5.5 Negatives

There are three, possibly four, negative morphemes in Bijago: 1. word-initial **#a-** used with imperfective (see also examples a. and b. in (9)), 2. **-(n)kV-** with perfective (see also example

(21)), 3. word initial #**nt**, the negator of focused constructions (as in (13)) and possibly, 4. **-ti-** as in (14).

(37) Negation of *inaccompli* (imperfective aspect)

ú-da ‘he/she/it is coming’ vs. **ɔ-da** ‘he/she/it is not coming’ (< **a-ú-da**)

The unspecified vowel of the morpheme that negates the *accompli* assumes the features of the following vowel. The optional nasal appears only if it is preceded by another verbal extension (in these examples, the morpheme **ba-**):

(38) Negation of *accompli* (perfective aspect) (2002:245)

a **ɔ-ba-nka-da**
3s.PFV-‘virtuel’-**NEG**-come
‘s’il **ne** vient **pas**’ [‘if he doesn’t come’]

b ka-jɔkɔ ka-ba-**nko**-got
Ka-house KA-‘virtuel’-**NEG**-burn
‘si la maison **ne** brûle **pas**’ [‘if the house hasn’t caught fire/isn’t on fire’]

6

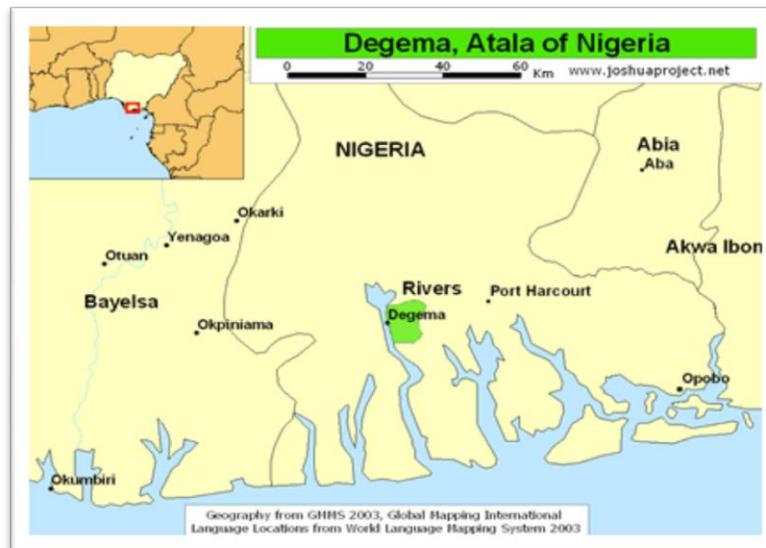
Degema

(Delta, Edoid, Atlantic-Congo)

Sarah Rose

6.1 General

Degema is a Delta Edoid language spoken by some 22,000¹ people in two communities, Usokun-Degema (Usokun) and Degema Town (Atala), in the Rivers State region of Southern Nigeria, quite near the town of Port Harcourt. This chapter is based on the Usokun dialect, analyzed by native speaker Kari (1997, 2002, 2003). Other languages in the Delta Edoid sub-group include Engenni and Epie-Atisa, of which the former is more similar to Degema than either is to the latter. Kalabari (Ijoid) is a second language for some speakers.



Map source: Joshua Project

Degema has a ten vowel system (five tense (or in Kari's terms "wide"), five lax ("narrow"))². In simple words, tense vowels occur with tense, lax with lax. Vowel harmony is pervasive. There are two basic tones, H (´) and L (unmarked), as well as a down-stepped high tone (-). Tone is important in Degema, distinguishing lexical items (as in (1)) as well as some sentence types (as in (2)):

- (1) **úgo** 'butterfly' vs. **ugó** 'palm-nut vulture' vs. **úgō** 'kind of stew'

¹ Not 50,000 as reported in Kari (1997) (Kari: p. c.)

² In the examples, I have modified Kari's orthographic convention to the more easily recognizable IPA system. Thus, with reference to the vowels, Kari's [i] equals IPA [ɪ], [e] equals [ɛ], [a] equals [ə], [ɑ] equals [a], [ɯ] equals [ʊ], [o] equals [ɔ]. See Kari (2004:368ff) for a full inventory.

- (2) Statement: **ɔʝɪ mɔ́-tá** vs. Question: **ɔʝɪ mɔ-ta**
 3s 3s-go 3s Q-go
 ‘He/she is going.’ ‘Is he/she going?’³

Degema has a thirteen-member noun-class system, (five singular, three plural and five single classes). “Modifying nominals” bear noun class agreement markers:

- (3) **ɔ-godó ɔ́-mómosi** vs. **e-godó í-mómosi**
 tall man ‘tall men’
 ‘a tall man’ ‘tall men’

Kari describes Degema morphology as “quite elaborate”, partly agglutinating and partly isolating. Derivation often involves prefixation, suffixation, or both:

- (4) Noun from verb: **-mɛsɪné** ‘dream’ (verb) > **ɪ-mɛsɪné** ‘dream’ (noun)
 Verbal noun from verb: **-dér** ‘cook’(verb) > **u-dér-əm** ‘cooking’(noun)
 Agent noun from verb: **-dí** ‘eat’ (verb) > **ɔ-dí-ām** ‘eater’ (noun)

Certain inflectional categories, such as perfect aspect (5a), inceptive aspect (5b) and factative⁴ aspect (5c), as well as the negative imperative, are marked at suffix. (More examples are to be found in the section on verbal morphology).

- (5) a perfect aspect: **ɔ-nú-té eni**
 3s-hit-PFT us
 ‘3s has hit us.’ (1997:58)
- b inceptive aspect: **nɔ b́áw-a**
 hit them-INCE
 ‘Begin to hit them!’ (1997:58)
- c factative aspect: **ólóló o-wú-ūn**
 bottle 3s-die-FAC
 ‘The bottle broke.’ (2004:268)

³ Kari identifies two types of clitic elements: those that precede their host (proclitics = PROCL) and those that follow (enclitics = ENCL). He notes that proclitics “function as pseudo-subjects” (1997:54). As in example (2), proclitics may occur with an overt pronominal subject (for emphasis, or when the subject is known) or alone, as in (5). The latter is, according to Kari, the preferred utterance for most speakers. For clarity, I have glossed what he terms PROCL as person subject markers. See Kari (2005b) for fuller discussion. Enclitics (analyzed by some authors as inflectional suffixes) are considered clitics by Kari, because of their “freedom of attachment to more than one grammatical category, and their phonological dependence on the hosts, i.e. their vowels agree with those of the host depending on whether the host has expanded or non-expanded vowels” (1997:56). Whereas Kari generally uses the symbol (=) to link proclitic person markers and enclitics, for the sake of uniformity of format, I have marked all morpheme boundaries with a dash.

⁴ Kari (p.c.) prefers the label factative (rather than perfective or imperfective) for call the enclitic **-Vn** because: “In Degema (Edoid) and Kalabari (Ijoid) [...] the factative marks past in dynamic verbs but past/non-past in stative verbs. Given this situation, one can really not describe factative as perfective, since in stative verbs factative could have a non-past or timeless meaning/interpretation”. I have glossed this suffix as FAC.

An extensive inventory of independent auxiliaries marks such categories as aspect (imperfective, inceptive), modality (imperative, unfulfilled, optative, obligation), negation and emphasis. (See Kari (2005a) for full discussion of auxiliaries and their role in grammar). Each of these is exemplified below in the section on verb structure.

6.2 Word Order

The basic word order in Degema is S V O X:

- (6) a **ɔʝɪ mɔ́-dér ʊ́sɔ́m**
 3s 3s-cook soup
 ‘3s is cooking soup.’ (1997:60)
- b **mɔ́-nó mé**
 3s-hit me
 ‘3s hits/will hit me.’ (1997:32)⁵

This order may be altered by the preposing of the focused constituent (7). Note that the focus marker is identical to the relative pronoun (translatable as ‘that or ‘who’) which introduces a relative clause (8)):

- (7) **esen nó Óhoso o-kú-ūn**
 fish FOC Ohoso 3s-catch-FAC
 ‘It is a fish that Ohoso caught.’ (1997:59)
- (8) **ólóló nó ɔ-fíjǎ-n ʊ́bo méɛ**
 bottle that 3s-cut-FAC hand my
 ‘the bottle that cut my hand.’ (1997:34)

6.3 Verb Structure

Degema is an aspect-based language. There are two types of verbal structures, simple, involving one main verb (as in (9)) and serial, involving two verbs (as in (15)). Modality employs an analytic structure involving a modal auxiliary and a main verb (see examples in §6.5).

6.3.1 Simple verbs

The structure of a Degema simple verb is as follows:

- (9) SM-ROOT-EXT-ASP-IMP.NEG

In position 1 appears the subject marker - Kari’s “proclitics” - directly followed by the verbal root in position 2 - what Kari calls “simple stems” (i.e., forms without extensions), all of which

⁵ Kari says that “the present and future time seem to be expressed in the same way ... unless there is a specific time phrase to distinguish them” (1997:45). In subsequent examples, I will generally provide only the translation as given by Kari with the proviso that there is room for alternate interpretations of time frame. See also §6.4.2.

begin with a consonant (1997:40). Roots with an extension are referred to as “complex stems”. See Kari (1997:41) for tone patterns of the verb stem. Certain SMs differ aspectually (2004:333): third person singular allomorph [ɔ-/o-] appears with PFV/FAC and PFT aspect, whereas [mɔ-/mo-] appears with IPFV aspect:

(10) a Subject marker with factative aspect

ɔ-dí-ĩn

3s-eat-FAC

‘3s ate.’ (2004:284)

b Subject marker with perfect aspect

ɔ-dí-tē

3s-eat-PFT

‘3s has eaten.’ (2004:293)

c Subject marker with IPFV aspect

mó-dí...

3s-eat.IPFV

‘3s eats/is eating/will eat.’

There are seven extensions in Degema, which appear in position 3, directly after the root:

(11) **gbe** + EsE > **gbesé**
 ‘go (home)’ causative ‘cause to go (home)’

The maximum allowable is three, which must appear in a certain order: reciprocal/benefactive/pluraction + causative + iterative/habitual. Thus:

(12) [lɔŋinɛsɛ́]
 /lɔ + vEnɪnE + EsE + vIrIj/
 shout + reciprocal + causative + iterative
 ‘cause to shout by itself many times’ (1997:42)

In position 4, after any extensions, appear certain aspect markers (discussed more fully in the following section). These include the “factative enclitic” -(V)**n** which marks “past time” with dynamic verbs “non-past time” or timeless situations with stative verbs. The tone pattern of root + “factative enclitic” is high-downstep:

(13) verb **dí** ‘eat’

a **mɪ-dí-ĩn**

1s-eat-FAC

‘I ate.’ (1997:44)

verb **tá** ‘go’

- b **mɪ-tá-ān**
1s-go-FAC
‘I went.’ (1997:44)

The negative imperative clitic may appear at final (see also §6.5):

- (14) **é-ta-tu**
2s-go-NEG.IMP
‘Don’t go!’ (Kari 1997:47)

6.3.2. *Serial verbs*

Kari (2003:271, 272) defines serial verbs as “two or more verbs strung together without an overt connective morpheme”(after Ndimele 1996:127) which may “share a common surface subject and one or more common aspectual/tense/polarity markers” (after Williamson 1989:30). The structure of a serial verb is as follows:

- (15) SM-ROOT ROOT-EXT-ASP

Generally, serial verb constructions in Degema are of the “concordial” type, where each verb in the series refers back to the subject by means of a pronoun or concordial marker. In this type of sentence, the single subject clitic appears on the initial verb:

- (16) **Tatane mɔ́-tá dɛ́ ísén**
Tatane 3s-go buy fish
‘Tatane will go and buy fish.’ (2003:273)

Kari analyses multi-verbed constructions as arising from two (or more) independent sentences. Thus:

- (17) a. **Ohoso ɔ́-tá-ān** b. **Ohoso ɔ́-dɛ́-n ísén**
Ohoso 3s-go-FAC Ohoso 3s-buy-FAC fish
‘Ohoso went.’ ‘Ohoso bought fish.’

combine to form:

- c. **Ohoso ɔ́-tá dɛ́-n ísén**
Ohoso 3s-go buy-FAC fish
‘Ohoso went and bought fish.’ (2003:275, 276)

A serial verb construction differs from a complex sentence, as in (18), where the subject clitics do *not* refer to the same person:

- (18) **Ohoso ɔ-kpérí báāw é-jī**
 Ohoso 3s-tell them.FAC 3p-come
 ‘Ohoso told them to come.’ (2003:276)

Kari observes that, for semantic reasons, the sequence of verbs in a Degema serial construction may not be reversed. The reason is that a typical serial verb consists of an action and subsequent result, comprising a single event. Thus, (19) is grammatical, since the “action of the non-initial verb (finishing) results from that of the initial verb (buying) ... It is not natural for the Degema people to finish off what is bought before buying it”(2003:277). (20) is, consequently, ungrammatical.

- (19) **Tatane ɔ-dé Bírésé-tē**
 Tatane 3s-buy cause to finish-PFT
 ‘Tatane has bought the quantity available of something.’(2003:277)

- (20) ***Tatane o-Bírésé dé-tē**

Whereas Degema does have a verbal extension which can, among its various meanings, be construed as “benefactive” or “applicative” (Kari 1997:42), the usual method of expressing these notions is via a serial verb construction:

- (21) **Ohoso ɔ-gbǐjé-n énam ɔ-kǐjé-n ɔji**
 Ohoso 3s-kill-FAC animal 3s-give-FAC him
 ‘Ohoso killed an animal for him.’ (2003:274)

- (22) **Breno ɔ-dé ké-n ɔji ɔsama**
 Breno 3s-buy.FAC give-FAC him shirt
 ‘Breno bought a shirt for him.’ (2003:280)

6.3.3 *Tense and Aspect Marking of Serial Verbs*

Unlike such constructions in other languages which “set” parameters on the first verb for all following verbs in the series, some serial verbs in Degema may be marked for two different aspects. In the following example, the first verb is marked FAC; the second is IPFV (by the IPFV allomorph of the SM, and by default, by the lack of overt PFV marking at suffix):

- (23) **Tatane o-kótú-n ɔji mɔ-pérí ínúm**
 Tatane 3s-call-FAC him 3s-tell something
 ‘Tatane called him and **is telling** him something.’ (2003:280)

Typically, though, a single aspect marker which appears on the last (rightmost) verb, sets the relevant parameter for all (previous) verbs (“Tense and aspect markers [...] are shared by the verbs in series”). That is, the (unmarked) verbs which precede the final verb depend on the last verb for their interpretation:

(24) **Imanete o-jí kótú-n óji**
 Imanete 3s-come call-FAC him
 ‘Imanete came and called him.’ (2003:284) (both construed as PFV)

(25) **Ohoso o-jí kótú-té óji**
 Ohoso 3s-come call-PFT him
 ‘Ohoso has come and called him.’ (2003:285) (both construed as PFT)

Sometimes, both verbs are marked. Note also that both verbs bear a subject marker:

(26) **Tatane o-kótú-n óji ɔ-kpáí-n ínúm**
 Tatane 3s-call-FAC him 3s-tell-FAC something
 ‘Tatane called him and told (him) something.’ (2003:285)

6.4 Aspect

The following is a summary of the main aspect and mood markers in Degema. There are no overt tense contrasts in Degema; as we have already seen, time reference is carried or implied by aspect.

6.4.1 Factative aspect

This aspect “...is used to denote a fact, which may be a dynamic situation that has already been completed or a state that once existed or still exists at the present time” (Jenewari 1980:133). With dynamic verbs, the factative indicates past time:

(27) **mi-dí-ín**
 1s-eat-FAC
 ‘I ate.’

With stative verbs, it indicates a state which has come into existence or that still exists (see also this usage in modal examples (38) and (40)):

(28) **o-mí-ín**
 3s-be wet-FAC
 ‘It became wet/It is wet.’ (Kari 2002:179)

The **-n** is deleted if the stem ends in a consonant. The unspecified vowel metathesises with the stem-final consonant:

(29) **ɔ-sóɔl** (Verb **sól** ‘jump’)
 3s-jump.FAC (**sól** + **ɔn** > **sólɔ** > **sóɔl**)
 ‘He jumped.’ (1997:44)

The factative marker can appear on non-verbal elements. In the following example, the first singular object pronoun **mɛ** ‘me’ is the host:

- (30) **ɔ-kó mé-ʼɛn**
 3s-give me-FAC
 ‘3s gave me.’ (2002:179)

6.4.2 Imperfective aspect

This aspect is unmarked. Generally, the interpretation of an unmarked verb is imperfect present:

- (31) **ɔʝi mó-máɲɲé ínúm**
 3s 3s-learn something
 ‘3s studies/is studying’ (2002:188)

However, the only way to tell the difference between the “present” and the “future” is via the use of a specific time phrase. Thus, the utterance in (32a) can mean either present imperfective ‘is going’ or future ‘will go’ to market. The utterance is disambiguated by such words as **mína** ‘now’ (32b), or **úde** ‘tomorrow’ (32c):

- (32) a **mó-tá m’éki**
 3s-go to market
 ‘3s goes/is going/will go to market.’ (1997:45)
- b **mó-tá m’éki mína**
 3s-go to market now
 ‘3s is going to market now.’
- c **mó-tá m’éki úde**
 3s-go to market tomorrow
 ‘3s will go to market tomorrow.’

6.4.3 Perfect aspect

Perfect aspect is marked by **-té/-te ~dé/-de**. The marker may appear either on the verb (33), or on an associated argument if the perfect appears in a serial verb (34):

- (33) **ɔ-nó-té éni**
 3s-hit-PFT us
 ‘3s has hit us.’ (1997:58)
- (34) **ɔ-dé kó mé-ʼté**
 3s-buy give me-PFT
 ‘3s has bought it for me.’ (2002:179)

The marker appears last if there are other elements such as extensions (35) or other enclitics, such as the “excessive enclitic” **Bírɛ** (36):

- (35) **o-tá-sé-^lté**
 3s-go-CAU-PFT
 ‘S/he has caused (somebody or something) to go’ (adapted from Kari 2002:185)
- (36) **o-kótú wó-βíré-^lté**
 3s-call you- too much-PFT
 ‘3s has called you too much.’ (2002:179)

6.5 Mood

Modality in Degema is expressed analytically, via the use of a modal auxiliary (‘want’, ‘have’, ‘be necessary’) plus a main verb.

6.5.1 Optative

A wish is expressed by the use of the verb **biné** ‘want’ plus **ókónó** which Kari interprets as **ók-** ‘way’ + **-nó** ‘that’.

- (37) **mi-βíné-n ók-nó mú-ji béne**
 1s-want-FAC way-that 2s-come here
 ‘I want you to come here.’ (adapted from Kari 1997:46)

6.5.2 Obligation

Obligation ‘must’ is expressed by the auxiliary **ɲán** ‘have’ plus **ókónó**:

- (38) **mi-ɲán ók-nó mé-mɔn wó**
 1s-have way-that 1s-see you
 ‘I must see you.’ (1997:46)

6.5.3 Ability

The ability to do something is expressed by auxiliary **ɲ^wéné** ‘be able’ plus a main verb. Note that this construction does not use **ókónó**:

- (39) **mi-ɲ^wéné mī-ɲáɲ ók**
 1s-be able 1s-drive vehicle
 ‘I can drive a vehicle.’ (1997:47)

6.5.4 Necessity.

Necessity is expressed by **kpé** ‘be necessary’ plus **ókónó**

- (40) **i-kpé-n** **ókò-nó** **mó-mésé**
 it-be necessary-FAC way-that 2s-sleep
 ‘It is necessary that you sleep.’ (1997:47)

6.6 Auxiliaries

Degema has a large arsenal of auxiliaries, which may have aspectual or modal meaning⁶:

The structure of this type is :

- (41) SM-AUX (SM)V

6.6.1 *Inceptive imperative auxiliary: **bóka (ma)** ‘begin to do something’:*

- (42) **á-bóka** **tá**
 2p-AUX go
 ‘You (p) should begin to go!’ (1997:37)

6.6.2 *Inceptive non-imperative auxiliary: **dá** ‘about to do something’*

- (43) **ɔ-dá** **mō-gbé**
 3s-AUX 3s-go
 ‘He is about to go’. (1997:37)

6.6.3 *Unfulfilled auxiliary: **ɲ^w áɲkɪ** (suggesting that the action was not carried out as intended):*

- (44) **ɔ-ɲ^w áɲkɪ** **gbije** **ómó** **jo**
 3s-AUX kill child the
 ‘He was about to kill the child.’ (1997:38)

6.7 Negation

Degema has many strategies for expressing negation. The following are the most common.

6.7.1 *Default negation*

Negation in Degema is signalled by a high tone (2003:278, 286). In simple sentences, the tone anchors on the subject clitic:

⁶ Kari (2004:133) reanalyzes **kɔ** ‘not’ as a negative adverb that participates in constituent negation, not as “a particle used for focus and emphasis” (as in Kari (1997:37ff)). See also Kari (2005a).

- (45) **Ohoso ó-βon élege**
 Ohoso 3s.NEG-take knife
 ‘Ohoso did not use a knife’ (2003:286)

Compare the tonal differences between the positive utterance in (46a) and the negative in (46b):

- (46) a **mi-βínén ókɔ-nó mú-yi βéne**
 1s-want way-that 2s-come here
 ‘I want you to come here.’
- b **mí-βine ókɔ-nó mó-ta m’éki**
 1s-want.NEG way-that 2s-go market
 ‘I don’t want you to go to the market.’ (Adapted from Kari 1997:46)

In serial verbs, the tone marking negative anchors on the SM of the first verb, but negates the entire predication:

- (47) **Jzakume ó-tam ídfjɔm ɔ-ɔ́ŋ**
 Jzakume 3s.NEG-chew food 3s-swallow
 ‘Jzakume did not chew food and (did not) swallow.’ (2003:278)

6.7.2 *Negative adverb kɔ́*

This element, essentially a negative copula, appears in sentence-initial position:

- (48) **kɔ́ ɔʒi nó o-méné-ən**
 NEG him that 3s-do-FAC
 ‘It was not he that did it.’ (1997:47)

There is as well a negative imperative auxiliary which appears appended to the second person plural SM in this initial position:

- (49) **á-máŋki méné úmene**
 2p-NEG.IMP do work
 ‘Don’t work!’ (Kari 1997:38)

6.7.3 *Negative imperative*

The negative imperative clitic **tu/tɔ** appears after a single verb (50) or appended to an object in either a single verb or a serial verb (51):

- (50) **é-ta-tu**
 2s-go-NEG.IMP
 ‘Don’t go!’ (1997:47)

- (51) **é-dɛ** **kɔ** **mɛ-tɔ**
2s-buy give me-NEG.IMP
'Don't buy (something) for me!' (2002:179)

6.7.4 *Not yet*

A morpheme meaning 'not yet' (**ma**) (described by Kari as an "imperfective auxiliary") may indicate that an action is 'not yet' accomplished.

- (52) **mí-ma** **sire**
1s-not yet run
'I have not yet run' (2002:181)

7

Donno So (Dogon) (Volta-Congo, Atlantic-Congo) Sarah Rose

7.1 General

Some seventeen Dogon varieties are spoken by approximately 700,000 people in Southeastern Mali (553,600) and Burkina Faso (138,000) (updated with SIL data, after Hochstetler et al. 2004). Most varieties are mutually unintelligible; at least one dialect, Bangi Me, does not belong in the group according to Blench (2005b). This chapter is based primarily on the Donno So(ɔ) dialect described by Kervran & Prost (1969) and Culy (1995)¹. Some data are from Tɔrɔ So(ɔ)², the national language of Mali.

Oral tradition claims Dogon speakers originated from the west bank of the Niger River, around 1490 A.D but Blench³, based on the many lexical and typological differences of Dogon from most other Niger-Congo languages, suggests that the “ancestor of Dogon is likely to have diverged [from proto-Niger Congo] very early, although the present-day languages probably reflect an origin some 3-4000 years ago”. He adds that “Dogon languages are territorially coherent, suggesting that, despite local migration histories, the Dogon have been in this area of Mali from their origin”. Presently, they are primarily agriculturalists, living in close proximity to other Niger-Congo language groups (Gur, Mande, Fulani).



Map source: World Factbook (CIA)

¹ I am in the process of updating the chapter to incorporate the recently published grammar of the Dogon dialect Jamsay (Heath 2008). Alternatively, I may devote another chapter to Jamsay itself, so that the reader may compare the two major dialects.

²The word **soo** refers broadly to ‘speaking’, be it as ‘language’, ‘way of speaking’ or even ‘piece of paper’. The name of the language itself is spelled differently, with short or long vowel, depending on particular authors. Kervran & Prost use the single vowel spelling of the Donno So dialect, a convention which I will use in this chapter.

³ http://homepage.ntlworld.com/roger_blench/Dogon/Dogon%20page.htm

Dogon has seven oral vowels: **i, e, ɛ, a, u, o, ɔ**, all occurring long and short, making a total of fourteen, as well as distinct nasal vowels in some dialects. There is limited vowel harmony, primarily (or exclusively) in verbs (see example (41)). Donno So has two tones, both marked here: high (´) and low (`) (Bendor-Samuel, Olsen & White 1989:172), although it should be noted that the tonal systems of various dialects have not been systematically studied. Dogon nouns show a vestige of a noun class system (mostly in kinship terms), with human nouns bearing a distinct plural suffix:

- (1) **ine** ‘person’ > **ineũ** ‘people’
 ãrã ‘man’ > **ãrãũ** ‘men’

7.2 Word Order

Dogon’s typology is rare among the Niger-Congo languages: Word order is strictly SOV, more like Mande or Ijo than other Niger-Congo languages. The general template is as follows:

- (2) S X O V AUX

Subject marking is on the far right of the verbal word (via cliticized pronouns), with TAM and NEG markers arranged between the root and the SM. Other syntactic structures (such as prepositional phrases) mirror this head-last typology. Noun phrases, however, show the following order: noun + adjective + definite + plural (Bendor-Samuel et al. 1989:176), as in the following example from Dogon dialect Tommo-so (data from Plungian (1995:10)), translated from the French):

- (3) **ene pilu gɛ mbe**
 goat white DEF plural
 ‘the white goats’

A minimal sentence in Donno So consists of a verb-less “presentation” utterance, formed by the addition of a post-posed low-toned (focus?) marker **-ñ** ‘it is’. The negative version deletes the **-ñ** and adds an independent negative word⁴ (data from Kervran & Prost (1969:50), with glosses translated from the French):

- (4) **mí bà** ‘my father’ > **mí bàñ** ‘it is my father’ > **mí bà làa** ‘it is not my father’

In Tɔɔ Soɔ (data from Bendor-Samuel et al. 1989:174), the same construction is marked by the post-posed marker **-i**:

- (5) **peju** ‘sheep’ (s) > **peju** ‘It is a sheep’
 peju gbe ‘the sheep’ (p) > **peju gbei** ‘It is the sheep’

A palatal nasal (represented by the symbol **-ñ** in Kervran & Prost), and typically high-toned, is appended to a noun or pronoun to mark a direct object:

⁴ A similar usage (with **le**) appears in Kisi.

- (6) a **mí bá-ñ w-è-Ø**
 my father-DO see-PFV-3s
 ‘He saw my father.’
- b **ú-ñ w-è-m**
 you-DO see-PFV-1s
 ‘I saw you.’ (both examples from Kervran & Prost 1969:51)

It can also be appended (to a typically animate argument) to mark indirect object, as in (7), where it serves to disambiguate thematic roles in this ditransitive sentence:

- (7) **mi aaga Andaa-ñ kεεlɔ ob-u-m**
 1s morning Anda-IO money give-PFV-1s
 ‘I gave the money to Anda this morning.’ (Culy 1995:48)

In (8), word order, in combination with assignment of OM marker, disambiguates the sentence: the first (leftmost) NP is understood to be the subject, the second OM-bearing item is understood to be the goal, the third NP is understood to be the theme (see Culy (1995:56) for details of rules governing placement of the OM).

- (8) **yaani i anna pay-ñ wɔjine tagaa be**
 female child male old-OM stranger showed AUX
 ‘The girl showed a stranger to an old man’.

7.3 Verb Structure

The structure of a “simple” (= synthetic = one-word) verb is as follows:

- (9) ROOT-EXT-NEG-TAM-SM

Verbs are root initial, followed by optional extensions, optional negative marker, TAM markers, with the SM word final (except in the case of 3s, where the marker is zero, as in examples (6a) and (11)). The subject markers are as follows: 1s **-m**, 2s **-u**, 3s **-Ø**, 1p **-ñ**, 2p **-ñ**, 3p **-i/-iya/-nni**. Occasionally, both pronominal subject markers and verb-final subject markers co-occur (10a):

- (10) a **pézɔ mí dè-yì-m** b **pézɔ da-l-i-m**
 sheep 1s kill-PFV-1s sheep kill-NEG-PFV-1s
 ‘I killed a sheep’ ‘I did not kill a sheep’
 (Verb **da** ‘kill’. Kervran & Prost 1969:52)

With third person forms, where the SM is zero, the TAM marker is word-final:

- (11) **dy-a-Ø** ‘he takes’ > **dy-ε-Ø** ‘he took’ (FV **-a** + perfective marker **-i** > **-ε**)

In “compound” (= analytic = two/three-word) verbs, the leftmost main lexical verbal element (regularly a participle, marked for aspect) is followed by an inflected auxiliary (discussed below). In verbs with two auxiliaries, only the last (rightmost) is inflected. The structure is:

(12) root-TAM (auxiliary₁ = **se/se** ‘have’⁵) auxiliary₂-(NEG)-TAM-SM

Here are some examples of analytic verbs using different participles, with their corresponding negatives:

(13) Analytic verb with imperfective participle and imperfective AUX **wɔ** ‘be’
(= present tense reference):

a	gɛndɛ-u wɔ-m look-IPFV be.IPFV ⁶ -1s ‘I am (there) looking.’ (Verb gɛndɛ ‘look’. Kervran & Prost 1969:78)	b	gɛndɛ-u wɔ-lɔ-m look-IPFV be.IPFV-NEG-1s ‘I am not looking.’
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(14) Analytic verb with perfect participle and AUX **se/ɛ** ‘have’:
(= present perfect)

a	bond-aa sɛ-m call-PFT have-1s ‘I have called.’ (Verb bondo ‘call’. Kervran & Prost 1969:79)	b	bond-aa sɛ-lɛ-m call-PFT have-NEG-1s ‘I have not called.’
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(15) Analytic verb with perfect participle and perfective AUX **be/ɛ** ‘be’
(= past reference)⁷

a	w-aa be-ñ see-PFT be.PFV-1p ‘We saw.’ (Verb w(a) ‘see’)	b	w-aa be-le-ñ see-PFT be.PFV-NEG-1p ‘We did not see.’
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7.3.1 Extensions

Donno So has a relatively small system of extensions which appear to be of recent origin (Williamson & Blench 2000:24):

⁵The first of the two auxiliaries (exclusively **se/se** ‘have’), appears in three verbal constructions: the analytic future, the conditional perfect and the “plus-que-parfait surcomposé” (Kervran & Prost (1969:80)) whose heavily marked (and somewhat artificial?) nature makes it difficult to render in English: **gondaa se be** ‘il avait été ayant regardé’. Note that the vowel in the verb **se/se** ‘have’ is variable (**e** ~ **ɛ**) (Kervran & Prost 1969:89). The significance – if any – of this alternation is unclear. A similar variation is seen in the verb **be/be** ‘be’.

⁶ See §7.6 for a discussion of the nature and distribution of the various existential auxiliaries, as well as glossing conventions.

⁷ See §7.5.2.2 for forms with FV **-i**, the alternative strategy for expressing past reference.

Reflexive:	dumo ‘be finished’	>	dume ‘finish’
	paga ‘attach’	>	page ‘attach to oneself’
	kaba ‘separate’	>	kabe ‘separate self’
Inversive:	daga ‘lock’	>	dagala ‘unlock’
	dɛbɛ ‘cover’	>	dɛbɛɛ ‘uncover’
Causative:	daba ‘cover’	>	dabara ‘make cover’
	go ‘leave’	>	gondo ‘make s.o. leave’
Permissive:	go ‘leave’	>	gomo ‘allow to leave’

Extensions may be combined:

(16) **go** ‘leave’ > **gondo** ‘make (someone) leave’ > **gondomo** ‘allow to make leave’

7.4 Participles

In addition to the participles exemplified above, there is a future participle, marked by suffix **-ni**, meaning ‘about to do something’:

(17) **gɛndɛ** ‘look’ > **gɛndɛni** ‘about to look’
wɔ ‘be’ > **wɔni** ‘about to be’

There is also a compound future perfect participle whose use indicates that the activity involved, although not yet accomplished, will have been accomplished before a second activity takes place. In the following example, as indicated by Kervran & Prost (1969:91), the *accompli* sense is conveyed by the infix **-aa-**, the future value by suffix **-ni**:

(18) **nama ɛb-aa-ni** **dyand-aaze-m**
meat buy-PFT-FUT cook-PFT-1s
‘Having bought the meat, I will cook it’⁸ (Kervran & Prost 1969:91)

7.5 Aspect, Tense and Mood

According to Bendor-Samuel et al. (1989:175), Dogon has a binary aspectual system (perfective vs. imperfective) which works in tandem with a binary modal system (realis vs. irrealis). However, the aspectual system could be analyzed as ternary (imperfective, perfective, perfect). Imperfective is the “default” aspect in the *Donno So* system: Imperfective is either unmarked (as in the radical, which is inherently imperfective), or marked by appended **-u** in the participle system, and includes a progressive (examples (28,29)), an habitual (which differs from the progressive only by tone (example (30))), an analytic form which Kervran & Prost call an “Imperfect” (example (31)) and two forms marked by reduplication of the radical vowel, an

⁸ This is a direct translation from Kervran & Prost’s French (“ayant acheté de la viande, je vais la cuire”). However, since the main verb **dyandaazem** is what Kervran & Prost (1969:79) refer to as the Simple Perfect, a more accurate (or at least a more literal) translation would likely be ‘Once I will have bought the meat, I(’ll) have it cooked’. More will be said on the possible analysis of the Simple Perfect below.

iterative (example 32) and the “Simple Future” (example (34)); Perfective is marked by **-i** (examples (35, 36); Perfect is marked by **-aa** (also **-waa**, or **-yaa**) (examples 42-44).

7.5.1 “Future”: tense, aspect or mood?

Although Donnɔ Sɔ is largely aspect-based, it is possible to consider the “Future” as modal (as Bendor-Samuel et al. have done), or, alternately, as a morphological Future tense (as Kervran & Prost have done). Future reference in Donnɔ Sɔ finite verbs is marked in two ways: 1. by reduplication, either of the root vowel (as in the iterative aspect)⁹ (example 19a), or of an entire syllable (example 19 b), or 2. by the use of **-zaa sɛ** (example 20), with no discernable meaning difference:

(19) Simple Future formed by reduplication

a of root vowel: **gɛ-ɛ-ndɛ-m** ‘I shall look.’

b of syllable: **nɔ-nɔ-m** ‘I shall drink.’

(20) Analytic future formed by the use of **-zaa sɛ**: **gɛndɛzaa sɛm** ‘I shall look.’

An iterative future is formed by combining the reduplicated root vowel form + **-zaa sɛ**:

(21) **gɛɛndɛzaa sɛm** ‘I shall look many times.’

A conditional combines the reduplicated root vowel form with perfective auxiliary **be/be** ‘be’:

(22) **gɛɛndɛ bem** ‘I would look.’ (lit: ‘will look I was’)

A conditional perfect combines either **gɛndɛzaa** or **gɛɛndɛzaa** with both auxiliaries **se/se** ‘have’ and **be/be** (perfective ‘be’):

(23) **gɛndɛzaa sɛ bem / gɛɛndɛzaa sɛ bem** ‘I would have looked.’

7.6 Verbal forms

Kervran & Prost (1969:64) claim four forms for a Donnɔ Sɔ verb, from which inflected forms can be constructed. These include: 1. a root or radical (the inherently Imperfective base for various Imperfectives, including the imperfective participle with appended **-u**, the imperative, the subjunctive¹⁰, the future participle with appended **-ni**, 2. a “narrative past”¹¹ marked by **-i**, 3. a

⁹ The overlap of iterative (or habitual) aspect and future tense is not uncommon. The shared morphological strategy of reduplication is iconic, representing an extension, either in time (present > future) or in number (one > many/repeated acts). Compare similar usages in Kisi.

¹⁰ There is but a single form for the subjunctive, identical to the third person singular (essentially, the radical), used in all persons (Kervran & Prost 1969:82). An example: **Amba úfi bara** ‘may God help you’. The negative form uses the prohibitive **-u**: **Amba kɔnnun dinge kanau** ‘May God not do the will of enemies’.

perfect participle¹² marked by **-aa**, and 4. a dependent form (“forme associée”), marked by **-u**¹³. These are illustrated below:

(24)	radical (IPFV)	“narrative past” (PFV)	perfect participle (PP) (PFT)	dependent form (DEP) (MODAL? See ex.(45))
	gɛndɛ	gɛndi	gɛndaa	gɛndu

7.6.1 Forms based on, or containing, the (imperfective) radical:

(25)	Imperatives:	a	second singular	gɛndɛ	‘Look!’
		b	second plural	gɛndɛñ	‘Look!’
		c	dual (inclusive)	gɛndɛmo	‘Let us (you and I) look!’
		d	plural (inclusive)	gɛndɛmoñ	‘Let us (all) look!’

(26)	Imperfective participle:	a	nya-u (verb nya ‘eat’) ‘eating’ (see also ex. 13a,b)	b	nya-lɛ-u ‘not eating’
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(27) Future participle: **gɛndɛ-ni** ‘about to look’

(28) Progressive: **gándɛ-zɛ-m** ‘I am looking.’¹⁴ / ‘I will look’.

Kervran & Prost say (1969:84) that the progressive is used to indicate that an action is not yet accomplished: it may be in progress, or about to be in progress. Consequently, it may be translated either as a present imperfective or as a future (illustrated here):

(29) **Hawa u-ñ taga-ze-m**
Hawa you-IO show-PRG-1s
‘I’ll show Hawa to you.’ (Culy 1995:49)

(30) Habitual: **gəndɛ-zɛ-m** ‘I am looking habitually.’

¹¹ This is Kervran & Prost’s terminology: “le passé narratif” (1969:67,70). I have analyzed these forms in **-i** not as past tense but perfective aspect.

¹² Bendor-Samuel et al. (1969:175) describe forms in **-aa** as “perfective”. I feel that some forms in **-aa** (though not all) are better analyzed as “perfect” (see examples 14 (a,b), 43, 44), with “perfective” reserved for forms in **-i**, or analytic forms in **-aa** with AUX **be/ɛ** (15 (a,b),47).

¹³ Despite their homonymy, the dependent **-u**, the imperfective marker **-u**, and the prohibitive marker (also **-u**) are not identical. See also examples (26,45,52,54).

¹⁴ I think that this form is a univerbation of an earlier two word structure – **gándɛ sɛm** – which collocated the (imperfective) radical **gándɛ** ‘look(ing)’ and the auxiliary verb **se/sɛ** ‘have’, with the literal meaning ‘look(ing) have-I’ = ‘I am looking’. (See example (31) for the ‘past’ version of this, where the imperfective sense is again conveyed by the radical, the past reference by the perfective auxiliary **be/be** ‘be’.) I assume a similar analysis for the “Simple” perfect, which is, I suggest, the univerbated form of a prior combination of the perfect participle **gəndaa** and auxiliary **sɛm** with the literal meaning ‘(having) looked have I’ = ‘I have looked’. Both analyses assume the intervocalic voicing of the /s/ of the auxiliary (as Kervran & Prost suggest (1969:76), once univerbation has taken place: **gándɛ sɛm** > **gándɛzɛm**).

(distinguished from progressive by tone; Regrettably, this is the only example of such a tonal contrast provided by Kervran & Prost.)

(31) (“Imperfect”¹⁵: **gɛndɛ be-m** ‘I was looking.’)

In iterative and future¹⁶ forms, the vowel of the radical is reduplicated:

(32) Iterative: **gɛɛndɛ-zɛ-m** ‘I sometimes look/am looking.’

(33) Imperfect iterative: **gɛɛndɛ be-m** ‘I was sometimes looking.’

(34) Simple future: **gɛɛndɛ-m** ‘I shall look.’

7.6.2 “Narrative past” (= perfective aspect)

(35) **paza** ‘leave’ > **pazi** ‘he left’
tɛbɛle ‘wrap’ > **tɛbɛli** ‘he wrapped’
kilee ‘steal’ > **kili** ‘he stole’

(36) a **gɛnd-u/i-m** b **gɛndɛ-l-u-m**
look-PFV-1s look-NEG-PFV-1s
‘I looked at.’ ‘I didn’t look at.’

In compound (= analytic) verbs (example (37)), the (rightmost) auxiliary determines the main time reference (here past via perfective **-i**). In complex sentences (examples (38) and (39)), the perfect participle may function as the verb in a subordinate clause:

(37) **paz-aa t-i**
leave-PFT send-PFV-Ø
‘He left (definitely).’ (Kervran & Prost 1969:90)

(38) **bombɔ yɛŋ-aa, i gɔ-ñ bomb-i**
carrier take-PFT child definite-DO put on back-PFV-Ø
‘Having taken the cloth, she put the child on her back.’

(39) **Amba Adama le Hawa léñ¹⁷ toŋ-aa, saza nɛ boz-i**
God Adam with Eve copula create-PFT garden in put-PFV-Ø
‘God, having created Adam and Eve, put them in the garden.’
(Kervran & Prost 1969:86)

The negative form of the perfective employs **-l-** before the TAM marker:

¹⁵ I employ Kervran & Prost’s term (1969:67).

¹⁶ Again, I employ Kervran & Prost’s term. As noted, forms which they term “future” could be analyzed as modal.

¹⁷ This morpheme is complex: it is explained by Kervran & Prost as a linking or copular element, formed from a combination of **le** ‘with’ plus the suffix **-ñ**. Its function is to link a noun and its attribute. Here, the meaning would be ‘Adam and Eve were (**leñ**) created (**tonaa**)’. See Kervran & Prost (1969:54,58).

(40) **gɛndi** ‘he looked’ > **gɛndɛ-l-i** ‘he has not looked’

Forms with extensions are subject to vowel harmony after the addition of **-i**:

(41) **damanda** ‘make go up’ > **damindi** ‘made go up’

7.6.3 Perfect participle

The Perfect participle appears regularly in a subordinate clause, as in examples (37) and (38) above, and often as the first element in the analytic perfect (where the auxiliary **wɔ** ‘be’ is used for intransitive verbs, giving a stative sense, and **se/sɛ** ‘have’ for transitive verbs, rendering a present perfect). Both examples are from Kervran & Prost (1969:79):

(42) a **yɛl-aa** **wɔ-m** b **yɛl-aa** **wɔ-lɔ-m**
 come-PFT be.IPFV-1s come-PFT be.IPFV-NEG-1s
 ‘I have come/am here.’ ‘I have not come.’

(43) a **paz-aa** **sɛ-m** b **paz-aa** **sɛ-lɛ-m**
 leave-PFT have-1s leave-PFT have-NEG-1s
 ‘I have left.’ ‘I have not left.’

The **-aa-** also appears to be incorporated into the “Simple” Perfect:

(44) **gɛnd-aa-zɛ-m**¹⁸
 look-PFT-zɛ-1s
 ‘I have looked.’ (Kervran & Prost 1969:79)

7.6.4 The Dependent form

The dependent form appears always in combination with another verb. It is common in the negative imperative (where the main verb is **na-** ‘forget’). Despite the labelling, we think it might be possible to consider this morpheme as a subjunctive:

(45) **gɛnd-u** **na-u**
 look-DEP forget-prohibitive
 ‘Don’t look!’ (Kervran & Prost 1969:81)
 (Possibly lit: ‘Do not forget lest you should look’)

7.7 Auxiliaries

Donno So has an extensive arsenal of auxiliary verbs, including two different existential verbs (imperfective) **wɔ** and (perfective) **be/beɛ**, both ‘be’, and one primarily locative (?) **to** ‘be in a

¹⁸ See fn. 13 for an analysis of this form.

place'. Whereas the first two are used as auxiliaries for the progressive, their distribution differs: Imperfective **wɔ** is used for present reference, and is glossed as be.IPFV; Perfective **be/be** is used for non-present (past and future) reference (and is glossed as be.PFV). Auxiliary **se/se** 'have' appears with the analytic future (example (20)), the conditional perfect (example (23)) and the "plus-que-parfait surcomposé" (fn.4).

Other auxiliaries convey various aspectual meanings: **-je** (according to Calame-Griaule, from a verb **jεε** 'take'), used without aspectual or modal restriction (Bendor-Samuel et al. 1989:175), **-do** (from **ɔɔ** 'arrive', used only in the progressive aspect), and **-gɔ** (from **gεε** 'say', used only in what Bendor-Samuel et al. call irrealis – given the verb, suggesting an evidential). The following example illustrates some of the more important auxiliary verbs, and the pronominal subject markers:

(46) wɔm 'I am'	bem 'I was'	bεbεm 'I will be'	sεm 'I have'
wɔu 'you are'	beu 'you were'	bεbεu 'you will be'	sεu 'you have'
wɔ 'he/she/it is'	be 'he/she/it was'	bebia [sic] 'he/she/it will be'	sε 'he/she/it has'
wɔñ 'we are'	beñ 'we were'	bεbεmmo 'we will be'	sεñ 'we have'
wɔñ 'you are'	beñ 'you were'	bεbεmmo 'you will be'	sεñ [sic] 'you have'
wuiya 'they are'	biya 'they were'	bεbεmmo 'they will be'	siya 'they have'

Below are examples with existential auxiliaries:

(47) Perfective aux **be/be** 'be' with past reference:

a **yaa, yεl-aa be**
 yesterday, come-PFT be.PFV-Ø
 'Yesterday, he had arrived.'¹⁹

b **Anta-ñ ibε-ra ya w-aa be-m**
 Anta-OM market-LOC yesterday see-PFT be.PFV-1s
 'I saw Anta at the market yesterday.' (Culy 1995:48)

(48) Imperfective aux **wɔ** 'be' with present reference:

yεl-aa wɔ
 come-PFT be.IPFV-Ø
 'He has come.' (= 'he is there') (Kervran & Prost 1969:88)

(49) a **ginε giru nε wɔ**
 house front in be.IPFV-Ø
 'He is in front of the house.'

¹⁹ This is called a pluperfect by Kervran & Prost (1969:89), presumably because of the double marking (perfect participle + perfective AUX). However, this analytic construction seems to be a common method of expressing past events, and is usually translated as a simple past, not as a pluperfect. Therefore, we see no reason why example (47a) could not be translated equally as correctly as 'Yesterday, he arrived'.

- b **gine giru nɛ be**
house front in be.PFV-Ø
‘He **was** in front of the house.’ (Kervran & Prost 1969:56).

Auxiliary **se/sɛ** ‘have’ appears primarily in analytic future forms, as in the following:

- (50) Analytic future: **gɛndɛzaa sɛm** ‘I shall look.’
Iterative future: **gɛɛndɛzaa sɛm** ‘I shall look several times.’
Conditional perfect: **gɛɛndɛzaa sɛ bem** ‘I would have looked.’

In combination with the perfect participle (as in example (43), repeated here), the use of this auxiliary renders a present perfect:

- (51) Present perfect (perfect aspect, present reference): **pazaa sɛm** ‘I have left.’

The Perfect is often analytic, using the perfect participle of the leftmost lexical verb and semantically compatible auxiliaries (indicating action is complete) **te** ‘send’, **bolo** ‘leave’, and **dya** ‘take’ in their perfective form. Note that although all three exist as full verbs, in this particular aspectual usage they show a substantial amount of semantic bleaching.

- (52) Examples of auxiliaries expressing perfect/perfective aspect:

- a with AUX **te** ‘send’:

dyag-aa t-i
break-PFT send-PFV-Ø
‘He broke/has broken.’ (Kervran & Prost 1969:90)

- b with AUX **bolo** ‘leave’:

yim-aa bol-i
die-PFT leave-PFV-Ø
‘He has died/is dead.’ (Kervran & Prost 1969:89)

- c with AUX **dya** ‘take’:

min-aa dy-ɛ
swallow-PFT take-PFV-Ø
‘He swallowed/has swallowed.’ (Kervran & Prost 1969:90)

7.8 Negatives

Dogon distinguishes two negatives, one a prohibitive, marked by final **-u** in the singular, **-giñ** in the plural:

(53) **gɛndɛ** ‘look’ > **gɛndɛ-u** ‘Don’t (s) look!’ > **gɛndɛ-giñ** ‘Don’t (p) look!’

There is a continuous prohibitive which uses a combination of the future participle and the perfective auxiliary **be/be** (Kervran & Prost 1969:81):

(54) **gɛndɛni bɛ** ‘Be looking!’ > **gɛndɛni bɛu** ‘Don’t be looking!’

The auxiliary **nau** (plural **nagiñ**) (verb **na** ‘forget’) may also be used. The leftmost main verb is put into the Dependent form, and the auxiliary bears the prohibitive marker:

(55) **gɛndu nau** ‘Don’t look!’

The majority of other negative forms are marked with **-IV-**. A post-posed independent particle **lâa** appears in the negative form of “presentation” utterances (as a denial of identity or existence).

(56) **mí bàñ** ‘It is my father’ > **mí bà lâa** ‘It is not my father’

The following table provides some representative examples of various forms and their negative counterparts (following). Note that in certain analytic forms with the existential auxiliaries, *either* the main verb or the auxiliary may bear the negative marker, with no discernable meaning difference (Kervran & Prost 1969:78):

(57) Affirmative

Existential auxiliaries:	wɔ-m ‘I am’ gɛndɛ-u wɔ-m ‘I am (there)looking’ be-m ‘I was’ gɛndɛ-u be-m ‘I was (there)looking’
Progressive:	gɛndɛ-zɛ-m ‘I am looking’/ ‘I will look’
Iterative:	gɛndɛ-zɛ-m ‘I am often looking’
“Imperfect”: (=past progressive)	gɛndɛ be-m ‘I was looking’
Simple perfect:	gɛnd-aa-zɛ-m ‘I have looked’
“PluPerfect”:	gɛnd-aa bem ‘I had looked’
Perfective:	gɛnd-i-Ø ‘he looked’
(analytic) future:	gɛndɛ-zaa sɛ-m ‘I shall look’
Imperfective participle:	gɛndɛ-u ‘looking’
Perfect participle:	gɛnd-aa ‘having looked’

Negative

Existential auxiliaries:	wɔ-lɔ-m ‘I am not’ gɛndɛ-u wɔ-lɔ-m / gɛndɛ-lɛ-u wɔ-m ‘I am not looking’ be-le-m ‘I was not’ gɛndɛ-u be-le-m / gɛndɛ-lɛ-u be-m ‘I was not looking’
--------------------------	--

Progressive:	gəndɛ-lɛ-m ‘I am not looking’
Iterative:	gɛndɛ-lɛ-m ‘I am not often looking’
“Imperfect”: (=past progressive)	gəndɛ be-le-m ‘I was not looking’
Simple perfect:	gənd-a-lɛ-m ‘I have not looked’
“PluPerfect”:	gənd-aa be-le-m / gəndɛ-lu be-m ‘I had not looked’
Perfective:	gəndɛ-l-i-Ø ‘he didn’t look’
(Analytic) future:	gəndɛ-zaa sɛ-lɛ-m ‘I shall not look’
Imperfective participle:	gəndɛ-lɛ-u ‘not looking’
Perfect participle:	gəndɛ-lu ‘not having looked’

In the simple future, suffix **-r** is found (**-d** after a nasal), which replaces both reduplication and certain vowels of the affirmative forms:

gəndɛ ‘look’	gɛndɛm ‘I shall look’	gəndɛrum ‘I shall not look’
nɔ ‘drink’	nɔnɔm ‘I shall drink’	nɔrum ‘I shall not drink’
kana ‘make’	kaanam ‘I shall make’	kandum ‘I shall not make’
paza ‘leave’	paazam ‘I shall leave’	parum ‘I shall not leave’

7.9 Summary of Forms (Affirmative only)

Imperatives:	gəndɛ ‘Look! (singular)’ gəndɛñ ‘Look! (plural)’ gəndɛmo ‘Let us (you and I) look!’ gəndɛmoñ ‘Let us (all) look!’
Participles:	gəndɛu (Present = Imperfective) ‘looking’ gəndɛni (Future) ‘about to look’ gəndaani (Future Perfect) ‘(once) having looked’ gəndaa (Perfect) ‘having looked’
Imperfective (progressive):	gəndɛzɛm ‘I look/am looking/will look’
Imperfective (habitual):	gəndɛzɛm ‘I am looking habitually’
Imperfective (iterative):	gɛndɛzɛm ‘I sometimes look’
“Imperfect” (analytic progressive):	gəndɛ bem ‘I was looking’
Imperfective (analytic iterative):	gɛndɛ bem ‘I kept looking’
Perfective (= “narrative past”):	gəndum/gəndim ‘I looked’
Simple perfect:	gəndaazɛm ‘I looked/have looked’
Simple future:	gɛndɛm ‘I shall look’
Analytic future:	gəndɛzaa sɛm ‘I shall look’
Iterative future:	gɛndɛzaa sɛm ‘I shall look repeatedly’
Conditional:	gɛndɛ bem ‘I would look’
Conditional perfect:	gəndɛzaa sɛ bem ‘I would have looked’

8

Doyayo

(Duru, Adamawa, Adamawa-Ubangi)

John Hewson

8.1 General

Doyayo, spoken by a people known as the Dowayo, is spoken in and around Poli, Department of the Benue, in North Cameroon, by some 15,000 speakers. The description here, based on Marinus and Elisabeth Wiering (1994), is of the Poli dialect. Doyayo has seven oral vowels, long (written geminated) and short [i, e, ε, a, ɔ, o, u], and five nasal vowels, long and short, marked by a cedilla in the orthography, but here marked by a tilde: [ĩ, ê, ã, õ, ù]. Every syllable carries one tone or a sequence of tones, which are indicated by means of raised numerals: high, mid-high, mid-low, ⁴ low. We are grateful to Elisabeth Wiering for correspondence, advice and correction of data.

8.2 Word order

Basic word order is S AUX V O X, as in (1a), although it precedes the infinitive, as in (1b). The O may also be fronted for focus, as in (1c). When objects are pronominal, both IO and DO, in that order, are cliticized to the V, as in (1d), or to AUX (whichever comes first) as in (1e). There are also complexities with the objects of multiple or sequential verbs.

- (1) a **mi gben daŋ gi luk du**
1s saw knife.DEM house in
'I found this knife in the house.'
- b **siŋ -mɔ gi lɛl hɛ di -go**
sister-2s is place sweep-IPFV
'Your sister is sweeping.'
- c **da nɛ -mi bɔ mi taa zaa loo -ko**
hat-1s DEM1s am.not other serve-IPFV
'I'm not going back to get my hat.'
- d **hi wãã⁴ -si⁴ -mi⁴ -ge⁴**
3p catch-BEN¹-me-him
'They caught him for me.'
- e **hi gi -si -mi -ge wãã -ko**
3p be-BEN-me-himcatch-IPFV
'They will be catching him for me.'

¹ We have consistently included the epenthetic vowel [i] as part of the preceding morph.

What is termed “Performative” aspect in this chapter has the simplest structure, consisting of V alone. Several aspects are based on the Incompletive, which has a more complicated structure. The Incompletive marker appears to be the verbal suffix **-ko**. It combines with various morphemes at AUX to give time, modal and aspectual forms such as the Progressive, “Future”, Habitual/Potential, Remote, and Past Time. Since not all the morphemes involved at AUX are shown as co-occurring, we cannot be sure of their absolute ordering, but it appears to be roughly as follows:

- (2) Habitual/Potential: **gɔ**²
 Remote: **da**³, “Undesirable” **za**
 Progressive: **gi**²
 Past Time: **ne**

The habitual function has a temporal meaning (‘when’) in a subordinate clause, but habitual or purposive in a main clause. Alone of the morphemes at AUX, its ordering is not fixed, as the variations in (3) show: the meaning of all three is the same.

- (3) a **gɔ mɔ re kɔ**
 POT 2s go
 ‘when you go’
 b **mɔ gɔ re kɔ**² ‘ibid’
 c **mɔ gɔ mɔ re kɔ**² ‘ibid’

8.3 Word formation

Doyayo has two types of morphemes, free (an open, lexical class) and bound (a grammatical, closed class). It is radically analytic: all roots are monosyllabic, although they may be compounded to create derived forms. Bound morphemes, which are postposed, are often composed of a single consonant, and may consequently be followed by an epenthetic vowel (see fn.1). Most roots have a verbal stem, and there are common suffixes which may be added to form a variety of nominalizations, as in (4) and (5):

- (4)
- | | |
|-------------------|----------------------------|
| wɔr | ‘die’ |
| wɔr ko | ‘death, corpse’ |
| wɔrk yɔ | ‘dead’ |
| wɔ le | ‘paralyzed’ |
| wɔ se | ‘epidemic’ |
| wɔr kil yɔ | ‘dead’ |
| wɔ tig yɔ | ‘anguish, extreme anxiety’ |
- (5)
- | | |
|-------------------------|--------------------|
| gaa | ‘shine, be bright’ |
| gaa to , gaat yɔ | ‘clean’ |
| gaa le | ‘bright’ |

gaa tig yɔ	‘cleanliness’
gaa kil yɔ	‘brightness, daylight’
gaa ki	‘very bright’

Other derivational suffixes are typical extensions of the verb. The following fourteen suffixes are listed by E. Wiering (1994:124) in order of frequency, beginning with the most frequent.

Roots:	ɓaa	kar⁴
1. Benefactive -s	ɓaas ‘seem hard to someone’	kas⁴¹ ‘climb for someone’
2. Immediate -z	ɓaaz ‘be hard just now’	kaz⁴ ‘climb this way’
3. Accessory -n	ɓaan ‘be hard with’	kan⁴ ‘climb with’
4. Prepunctive	ɓaad / ɓaa dir -d/-dir ‘already be hard’	kard⁴ / kad⁴ ‘already have climbed’
5. Reciprocal	-tin ɓaa tin¹ ‘all be hard’	kar⁴tin / ka⁴tin ‘climb together’
6. Intensive/durative	ɓaas²³¹ ‘be so hard’ -s/-sig ɓaa sig¹ ‘stay so hard’	ka⁴sig¹ ‘keep on climbing’
7. Causative -s	ɓaas ‘harden, strengthen’	kas⁴ ‘bring up, cause to mount’
Root:	kpɛ̃ɛ ‘close’	
8. Passive -y	kpɛ̃ɛy¹ ‘be closed’	kay / ka ri¹ ‘be climbed, mounted’
9. Iterative -t	ɓaat²³ ‘several are hard’	kat⁴ ‘climb many times’
10. Distributive	-l ɓaal²³ ‘be hard in several places’	ka⁴ril ‘climb many trees’
11. Intensive/ reversive -r	gub⁴ ‘pour out, spill’ kpɛ̃ɛr⁴ ‘open’	gubr⁴ ‘spill completely’
Roots:	zī ‘long’ (ADJ)	tus ‘spit’
12. Augmentative -m	zīm ‘be long’	tums ‘spit out’

It must be remembered whenever the head verb is formed from an infinitive root, the derivational and pronominal object suffixes are fronted and cliticized to the immediately preceding auxiliary (**gi**) which in these circumstances becomes obligatory (see (1e) above). This shift is also required if the imperfective suffix /-ko³/ is used. Suffixes include **-ko³** (Incomplete) and **-ɔ³** (Performative).

8.4.1 *Contrastive representations of time*

As in many Niger-Congo languages, the contrast between past and present events is represented aspectually: whatever is represented as complete is normally understood to be past, and whatever is represented as incomplete is normally understood as ongoing in the present, but these default understandings may be altered by adverbial and other elements.

A review of all the data, however, leads to the conclusion that a case can be made for a binary tense contrast between future and non-future, as discussed in §8.4.4.

8.4.2 *The representation of complete or unchanging events*

The least marked form of the verb is described as an ‘aorist’ (1994:54), presumably because it has two complementary functions, ‘a completive and a gnomic aspect’. The completive function is used to represent past time, ‘an action, process, or state completed or existing in the past’. The gnomic function is generic, as in English *water boils at 100 degrees centigrade*. With stative verbs it likewise normally represents the present. This twofold function indicates that it is not a Perfective (which is the form that was labeled *aorist* by the ancient Greek grammarians), but a Performative, similar to the simple forms of the English verb, but without the English tense contrast between past and non-past.

In (8) we give the paradigm of an activity verb (‘pour’) and an inchoative verb with a resultant state (‘grow’), which has also undergone reduplication. In this aspect the subject pronoun and the verb maintain their base or lexical tones, the suffix /-ɔ/ is added, and the third person singular subject is omitted.

(8)	mi kpe⁴lɔ⁴	‘I pour(ed)’	mi tɔɔ tɔ	‘I grew (am) big’
	mɔ kpe⁴lɔ⁴	‘you pour(ed)’	mɔ tɔɔ tɔ	‘you (s) grew (are) big’
	kpe⁴lɔ⁴	‘3s pours, poured’	tɔɔ tɔ	‘3s grew (is) big’

8.4.3 *The representation of incomplete events*

There is a Progressive, which uses the (optional) auxiliary **gi²** ‘be’, with the tone of the stem changing to high, and also a suffix /-ko / with allomorphs /-k , -g , -ko , -go , -ko , -go /, although /-s, -z/, and other variations are found. The verb stem may also be optionally repeated (as in (10a)). It will be noted that the vowel of the aspect marker is lost when it occurs internally in the sentence.

The fact that the auxiliary of the Progressive is optional is an indicator that the verb root with suffix **-ko** may by itself be an Imperfective, which becomes a Progressive when the auxiliary is used, in the same way that the English *-ing* participle has an imperfective sense when used without auxiliary (*Knowing the answer, he smiled*, but

**Since he was knowing the answer...*). There are, in fact, occasional usages of the /-ko / form that would be extremely unlikely with a Progressive, but normal usage for an Imperfective, as in (9), where the suffix was originally labeled “incompletive”.

- (9) **taa -si -be bɛr -ko**
 1s.not-BEN-me be.good-IPFV
 (‘It is not good for me.’ / *‘It is not being good for me.’) = ‘I sure don’t like it.’

The paradigmatic usage of the “incompletive” is shown in (10), with optional auxiliary and optional repetition of the verb stem:

- (10) a **mi (gi) kpel-k mɛm (kpe ɔ)** ‘I am pouring water’
 mɔ (gi) kpel-k mɛm (kpe ɔ) ‘you (s) are pouring water’
 (gi) kpel-k mɛm (kpe ɔ) ‘3s is pouring water’
- b **mi (gi) luk hɛ d-i -go** ‘I am sweeping house’
 mɔ (gi) luk hɛ d-i -go ‘you (s) are sweeping house’
 (gi) luk hɛ d-i -go ‘3s is sweeping house’
- c **mi (gi) tɔɔ -k tɔ or mi (gi) tɔɔ -kɔ** ‘I am growing’
 mɔ (gi) tɔɔ -k tɔ or mi (gi) tɔɔ -kɔ ‘you (s) are growing’
 (gi) tɔɔ -k tɔ or (gi) tɔɔ -kɔ ‘3s is growing’

In these paradigms the final /-l/ of /kpel-k/ is a distributive extension, and [-k] the aspect marker³; the /-i -/ of /hɛ d-i -go / is an epenthetic vowel, and [-go] the aspect marker; in the reduplicated verb the position of the aspect marker is variable. In the (b) examples the noun **luk**¹ ‘house’ is generic, and the meaning is ‘house-sweeping’ (see (1a) above); the normal position for a direct object is seen in (a).

8.4.4 *The representation of future situations*

There are two forms to represent future situations, a proximate or immediate future, and a remote future. The Proximate is a form of the Progressive: it has the same high tone on the stem, the same optional auxiliary **gi**, and the same **go** suffix. It differs from the Progressive in that the subject pronoun has high tone, as in (11).

- (11) **mi (gi) kpel-k mɛm (kpe ɔ)** ‘I am about to pour water’
 mɔ (gi) kpel-k mɛm (kpe ɔ) ‘you (s) are about to pour water’
 (gi) kpel-k mɛm (kpe ɔ) ‘3s is about to pour water’

The Remote is a form of the Performative; it also has high tone on the subject marker, but the stem maintains its normal lexical tone, as in (12).

- (12) **mi kpe⁴ɔ⁴** ‘I will pour’ **mi tɔɔ tɔ** ‘I will grow big’

³ The FV is omitted except in phrase-final position.

mɔ kpe⁴lɔ⁴ ‘you (s) will pour’ **mɔ tɔɔ tɔ** ‘you (s) will grow big’
gi kpe⁴lɔ⁴ ‘3s will pour’ **gi tɔɔ tɔ** ‘3s will grow big’

It may be noted that the 3s subject cannot be omitted when the high tone form is used. The two futures consequently appear to be Prospectives, tonal variants of the Performative and Progressive/ Imperfective. Elisabeth Wiering notes (1994:54) that **mɔ kpe⁴lɔ⁴**, the Performative Prospective, can function as an indirect imperative: it can mean either ‘you will pour’ or simply ‘pour!’.

8.4.5 *The particle nɛ¹*

The particle **nɛ¹** is used to mark a clause as representing an earlier event, as in (13a) and (13b). In Elisabeth Wiering’s data it appears to be used only with incomplete verbs, and may simply be a particle for creating past usages of the Imperfective/Progressive. Occasionally as in (13c) it may be translated by perfect forms in English, but its usage is not that of a Perfect or Retrospective.

- (13) a **be gi-m nɛ tɛk be gbɛ nu-m gɛ**
 1s am-youprior look 1s see-you not
 ‘I was looking for you and couldn’t find you.’
- b **yɔ buu yɔ da gii wɛ nɛ gbaa -ko**
 when white when REM be-REM-us prior keep-IPFV
 ‘When the white people used to look after us...’
- c **lɔmt bɔ da gi nɛ le -ko**
 fig REL REM is prior eat-IPFV
 ‘The wild fig he had been eating...’

8.4.6 *Summary overview of tense and aspect in Doyayo*

There are several features in the data that has been presented that are quite typical of the verbal systems of Niger-Congo languages. The first of these is the use of aspect rather than tense to distinguish the present from the past. If the whole of time is represented by the Vast Present, it necessarily follows that whatever is represented as complete in the Vast Present necessarily represents a past event, whereas whatever is represented as incomplete is necessarily still ongoing, partially complete (in the past) and partially incomplete (in the non-past).

A second feature that is found elsewhere is what may well be a binary tense distinction between future and non-future, marked in Doyayo by a difference of tone on the subject marker. Since this is also a representational distinction between experiential time and imaginary time, which necessarily involves the element of modality, it is possible to argue that this is a distinction of mood rather than tense. The fact remains, however, that such a binary contrast involves the whole of universal time, the kind of time that contains events, and is consequently, whether it is also modal or not, necessarily a tense contrast. In this respect the data from Doyayo is particularly interesting, since the

two major aspectual contrasts, the completive (Performative in Doyayo) and the incompletive (Imperfective, which becomes Progressive when the auxiliary is added) are found in each of the two apparent contrastive tenses. This is a normal distribution pattern for tense and aspect contrasts, the data of English, with its binary tense contrast of Past vs. Non-past being quite typical, as demonstrated in (14).

(14)	Performative	Progressive	Prospective	Retrospective
Non-past	I speak	I am speaking	I will speak	I have spoken
Past	I spoke	I was speaking	I would speak	I had spoken

The binary tense contrast of Future vs. Non-future does not occur in Indo-European, but the pattern that occurs in Doyayo, as in (15), is exactly what one would expect of such a contrast:

(15)	Performative	Imperfective
Non-future	past	present
Future	far future	near future

What is complete in the Non-future is necessarily a representation of past time, and what is incomplete in the Non-future is a representation of the ongoing, unending activity of present time. What is complete in the Future is a representation of an event that is wholly in future time, without any connection to the present: a totally imaginary event. What is incomplete in the Future is an act that is in some way (normally by simple intention) connected to the present moment, as when we say in English “I’m leaving for Montreal on Friday”. This English example, however, is a Non-past, not a Future tense, and English speakers need to be reminded that a Future vs. Non-future distinction is for them a totally foreign contrast. The important point to note is that a Future Imperfective is a representation of an event to be carried out in the initial moments of future time, the completion of something already underway or in the throes of getting started, and consequently incomplete.

8.5 The representation of modality

Modality is represented by combining aspect (Performative, Progressive) with a variety of clausal particles. A few examples are in (16). Readers will notice that the subjunctive mood is not represented by inflections, as it often is in other Niger-Congo languages.

- (16) a **an wε mεε yɔ yɔ wε tɔ gεε**
 if 1p knew INTS RES 1p eat not
 (conditional, intensive, resultative particles)
 ‘If we had known, we wouldn’t have eaten (it).’
- b **a⁴ be aas yɔ mɔ tuu⁴ tu**
 if 1s open RES 2s go.out
 ‘If I open it you will go out.’

- c **gi an mɔ kɛ mɔ**
 be that 2s understand
 ‘It is necessary that you understand.’

8.6 Negatives

There are three negative constructions. The first is found with the Performative aspect, the second with the Imperfective, and the third with Imperative. This results in a distinction between past time, represented by the first of these, non-past time represented by the second, and imaginary time represented by the third. In the first the negative particle **gɛ** is added at the end of the phrase. The subject pronoun takes tone ̄ and the third person subject is deleted as usual. The verb takes tone ̄ on its nuclear syllable, tone ̄ on the second syllable (if any), and tone ̄ on the third syllable (if any), as in (17).

- (17) a **zaa -za / zaa gɛɛ** ‘he came / he didn’t come’
 (verb only has reduplication in clause-final position)
- b **mi gbɛ ni -ge / mi gbɛ ni-g gɛɛ**²³ ‘I saw him / I didn’t see him’
- c **hi wãã⁴-si⁴-mi⁴-ge⁴**
 3p catch-BEN-me-him
 ‘They caught him for me.’
- d **hi wãã -si -mi-g gɛɛ**
 3p catch-BEN-me-him not
 ‘They didn’t catch him for me.’

In the second negative construction the distinctions between the Remote, Proximate, and Present are neutralized: all three have the same form. The subject pronoun again has high tone, but the negative auxiliary **taa**¹² ‘be not’ replaces the normal **gi**² ‘be’, and the **-ko** suffix carries tone ̄ as in (18).

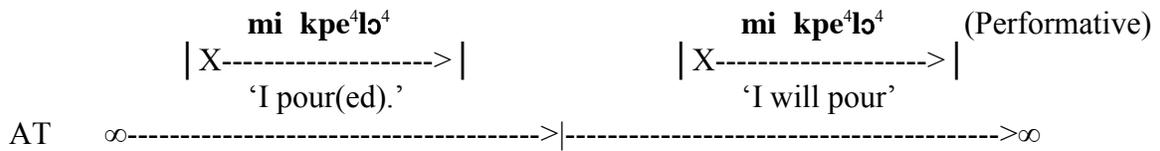
- (18) a **hi taa zaa -ko**
 1p be.not return-IPFV
 ‘they will not come, are not coming, are not going to come’
- b **mi taa wɛɛ -zi -go**
 1s be.not return-IMM-IPFV
 ‘I will not return, am not returning, am not going to...’

The third negative construction has an interdictory word **bɔ** in initial position, followed by subject pronoun and verb with the tones of the remote future, as in (19).

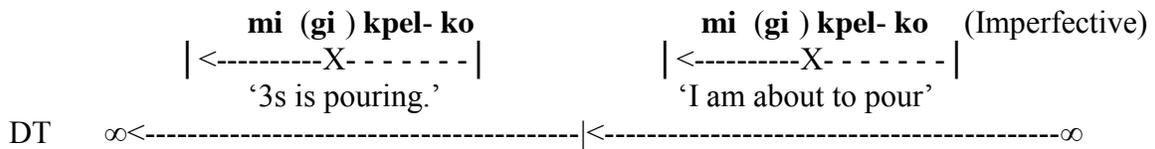
- (19) **bɔ mɔ re k-ɔ³** ‘don’t go!’
 bɔ wɛ le g-ɔ³ ‘let’s not get stuck!’
 bɔ hi fɔ⁴-ge¹ ‘let them not follow him!’

8.7 Diagrammatic Representations

(i) Forms in Ascending Time



(ii) Forms in Descending Time



1. The Performative is the unmarked form of the paradigm.
2. The Imperfective is marked by the suffix - **ko** - on the root.
3. The Progressive is marked by the auxiliary **gi** .
4. The Future is marked by High Tone on the subject pronoun.

9

Ejagham (Ekoid Bantu)

John Hewson

9.1 General

Ejagham is an Ekoid Bantu language spoken, according to Grimes (2005), by “60,000 to 70,000 speakers in (South East) Nigeria, 45,000 to 50,000 in (South West) Cameroon”. Some 220,000 people speak Ekoid languages, and Ejagham counts for some 120,000 of these, in a single community living astride the border between Nigeria and Cameroon. The source of our data is a PhD thesis by J.R. Watters (1981). We are also grateful to John Watters personally for correspondence, information, and advice.

9.2 Word Order

Word order is S V O X, as in the following example from Watters (1981:363).

- (1) àyûk à-kí¹-súm ðbí
 Ayuk 3s-PRG-hit Obi
 ‘Ayuk is hitting Obi.’

When a verb is used with a dependent infinitive, however, the object immediately precedes the infinitive, as in (2), from Watters (1981:402).

- (2) yε à-érŋè è-kpà è-t èŋ-óm
 3s 3s.PFM-know 5-sleep.mat 5-weave-INF
 ‘She knows how to weave sleeping mats.’

9.3 Verb Structure

The structure of the Ejagham verb is as follows:

- (3) SM-NEG-A-REP-ROOT-SUF-FV

All verbs have a subject prefix marked for person and number. As will be seen in the following paradigms, aspect is mostly marked by tones, but there is a pre-stem marker **-kí-** for Progressive aspect, and a post-posed marker **-ág** used for an Imperfective/Habitual (simply **-g** after vowels, and **-a** after consonants). There are also auxiliary modal markers **tíg** and **kám**, representing possibility and ability, respectively, separate units that precede the verb.

Another more unusual prefix (**kpó** ‘again’) is referred to by Watters as a “Repetitive”¹. This formative appears to have the meaning of something added: either

¹Abbreviated in this chapter as REP.

another event or another mention. It has two main functions: (i) representing the repetition of the act as in (4), and (ii) mentioning the event for a second time as in (5). It is also used with a variety of aspectual and modal forms.

- (4) **à-kpó-gbǔ** **à-kí¹-kpó-gbǔ**
 3s-REP-fall.PFM 3s-PRG-REP-fall
 ‘3s has fallen again.’ ‘3s is falling again.’
- (5) **à-kpò-fág**
 3s-REP-sweep.IPFV
 ‘he having swept’ (from previous mention)

Aspectual distinctions are mostly formed by tone contrasts. There is a tone on the subject marker, and one tone or more on the verbal root, depending on the number of syllables (typically one or two). There are three patterns of tone on the subject marker: (i) all high, as in Conditionals (§9.4.4 below); (ii) all low or high except 3p, as in (§9.4.2, 9.4.3, 9.4.3.1; (iii) all low or high except 3s as in §9.4.1. The patterns are complicated by floating tones left over after the segmental material to which they were attached has been lost.

There are two patterns of tone on the verb root, LH or H. The verb **gbǔ** ‘fall’, used in the paradigms as a lexical element, has a LH tone. Sometimes the verb roots retain their lexical tones; at other times the tones may be either rising or falling (the result of the collision of floating tones), depending upon the particular paradigm. Only in the Perfect (§9.4.1) is there a difference of *lexical* tone within the paradigm: the 3s is different from the rest.

9.4 Aspect

Since tense is not marked (1981:364), i.e. there are no tense distinctions, just a single Vast Present that represents the whole of time, this section deals exclusively with aspect. The information reported here is from section 6.3 of Watters (1981). His original ordering of material has been retained for ease of cross reference, although we have changed the actual numbering of sections.

9.4.1 Perfect

This form is characterized by a high tone on the subject prefix (excepting the 3s), a low tone on the verb root. With verbs of resultant state and body orientation (*sleep, sit, stand*, etc) these forms have the value of a simple present tense, a usage which is common throughout the Niger-Congo phylum for this set of verbs. The perfect can also be used to “express the recent past” (1981:370) “during the current day”. The verb is - **gbǔ** ‘fall’.

(6) Retrospective (Perfect)

Singular	Plural
Ń-gbò ‘I fell/have fallen’	é-gbò ‘We fell/have fallen’

ó-gb̀̀ ‘You fell/have fallen’	á-gb̀̀ ‘You fell/have fallen’
à-gb̀̀ ‘3s fell/has fallen’	á-gb̀̀ ‘They fell/have fallen’

9.4.2 *Performative*

The Performative (“Factative” in Welmers (1973:347)) normally represents complete events in the past, and is used as the main narrative form, but it can also be used for representing present states, as in (2) above, where *know* is a stative verb with present reference, a usage which is not possible for a Perfective, but normal for a Performative. The form is also used in “procedural discourse”, where instructions are given on how to carry out a certain activity: “...you go out and cut sticks, you carry them home. You gather those sticks and keep them” (1973:375), another usage where you it is common to use Performatives, but not Perfectives.

There is a low tone on the subject prefix (except 3p), HL (falling tone) on the root. The Performative in Ejagham can be used to represent the recent past, but only after a lapse of four to six hours. When used with the preposed modal particle **tíg** it represents an imaginary event, and the combined form is used to represent events in the future (Watters 1981:373), as exemplified in (7):

(7) Performative	‘Future’/Potential
Ñ-gb̀̀ ‘I fell’	tíg Ñ-gb̀̀ ‘I will fall’
ò-gb̀̀ ‘2s fell’	tíg ò-gb̀̀ ‘2s will fall’
à-gb̀̀ ‘3s fell’	tíg à-gb̀̀ ‘3s will fall’
è-gb̀̀ ‘We fell’	tíg è-gb̀̀ ‘We will fall’
à-gb̀̀ ‘You fell’	tíg à-gb̀̀ ‘You will fall’
á-gb̀̀ ‘They fell’	tíg á-gb̀̀ ‘They will fall’

The element **tíg** may also be used adverbially, following the verb in the usual position for adverbs, with the meaning ‘perhaps’. Preposed to the verb it has the same effect as a modal auxiliary, creating a representation of an event in imaginary time, and hence here labelled “Potential”. Since the Potential category does not allow for internal aspectual contrasts, the evidence indicates that this is a modal, rather than a tense category.

9.4.3 *Imperfective*

Watters uses the term “imperfective” in a generic sense to refer to two different forms, the Habitual/Concomitant marked by a suffix **-ág**, and the Continuous, marked by a prefix **kí**¹.

There is evidence that the first of these can be interpreted as simple Imperfective, which has an habitual or generic sense because, for lack of any tense contrasts, it represents, as a linguistic form, the whole of undivided universal time as a Vast Present.

These forms are quite common, especially in languages that lack tense contrasts, and are sometimes mistakenly called “aorists” because of their habitual or generic sense².

(8) **Imperfective**

Singular		Plural	
Ñ-gbǒ-g	‘I fall (habitually)’	è-gbǒ-g	‘We fall (habitually)’
ò-gbǒ-g	‘you fall (habitually)’	à-gbǒ-g	‘you fall (habitually)’
à-gbǒ-g	‘3s falls (habitually)’	á-gbǒ-g	‘They fall (habitually)’

In the case of high tone verb roots, 3p has a following downstep feature.

9.4.4 ‘Continuous’/Progressive

There is also evidence that the continuous aspect, formed with the prefix **kí**¹, may be a Progressive. As with the IPFV, subject prefixes are low toned (except for 3p). Verb roots have their lexical tones. It may be noted at this point that there are three positions for aspect and mode markers: (i) before the subject prefix (e.g. Potential), (ii) after the subject prefix but before the root (Progressive), and (iii) after the root (IPFV).

(9) **‘Continuous’/Progressive**

Singular		Plural	
Ñ-kí-gbǒ	‘I am falling’	à-kí-gbǒ	‘We are falling’
ò-kí-gbǒ	‘you are falling’	à-kí-gbǒ	‘you are falling’
à-kí-gbǒ	‘3s is falling’	á-kí-gbǒ	‘They are falling’

There is considerable overlap in the usage of the IPFV and the PRG, as is to be expected. Watters reports (1981:389) that both are used “in relative clauses, clauses with a focus particle, interrogative word questions, answers to interrogative word questions, and sentences with contrastive focus on an argument or predicate.”

A contrastive distribution emerges, however, between representations of the Habitual and the Continuous. Both may be used to represent the continuous, as in English *I am eating right now*, but only the Imperfective can be used to represent the habitual as in *On Fridays he always ate fish* where the English Progressive is not suitable: *?On Fridays he was always eating fish* but the French Imperfective *must* be used: *Le vendredi il mangeait toujours le poisson*.

²An aorist being, by definition, a Perfective, not an Imperfective (Comrie 1976:17).

9.4.5 Conditional

The Conditional seems to be of a Situative type. The subject prefixes are all high, and there are no exceptions (consequently 3s and 3p forms are identical). The lexical tone is that of the verb root.

(10) ‘Conditional’/Situative

Singular	Plural
Ñ-gbǎ ‘If I fell’	é-gbǎ ‘If we fell’
ó-gbǎ ‘If you fell’	á-gbǎ ‘If you fell’
á-gbǎ ‘If 3s fell’	á-gbǎ ‘If they fell’

A Situative aspect is a representation of an event that is either a possibility, just about to start, just starting, or just perceived (it is quite often found after verbs of perception where it represents the initial moment of the perception). Instead of representing the subject in the middle of the event (Imperfective) or at the end of the event (Perfective), the subject is represented in initial position, ready to begin the event.

9.5 Other verbal categories

9.5.1 Imperative

The simple imperative of LH verbs maintains the lexical tone in the singular, e.g. **sũ** ‘wash (them)’, but shifts to L before the plural inflection: **sũ-èn** ‘Wash (pl) (them)’.

9.5.2 ‘Hortative/Optative’/Subjunctive

This appears to be an ordinary subjunctive. Tone on the subject pronouns is low, but like the Retrospective (Perfect), the tone on 3s is different from that on the other subject pronouns. With LH verb roots, the lexical tone occurs only with this 3s form; in all the other persons “the lexical tone is altered to a surface tone of a high followed by a downstepped high” (Watters 1981:396). Because the verb ‘fall’ is unlikely to be used as either an imperative or hortative, we have used the verb **-sũ** ‘to wash’, which is also LH.

(11) Subjunctive

Singular	Plural
Ñ-sũ ‘I should wash (it)’	è-sũ ‘We should wash (it)’
ò-sũ ‘2s should wash (it)’	à-sũ ‘You should wash (it)’
á-sũ ‘3s should wash (it)’	à-sũ ‘They should wash (it)’

9.6 Negatives

There is a general negative marker, as in **á-kà-gbǔ** ‘3s didn’t fall/hasn’t fallen’, with a high subject tone for all persons, and a basic tone on the root of LH verbs. High tone verbs on the other hand, have a high tone on the prefix **ka-** followed by a downstep feature on the root. A special prefix **bǔ** is used only with the Imperfective: the subject prefixes have high tone and the verb roots have their lexical tone, as in (12), from Watters (1981:425).

- (12) **á-bǔ-gbǔ** ‘(S)he isn’t falling, they aren’t falling’
á-bǔ-fág ‘(S)he isn’t sweeping (it), they aren’t sweeping (it)’

There is also a cessative negative with the negative prefix **rǔ-** and the sense of ‘no longer’, which negates the Habitual. It is also used with Conditionals (representations of events which, not having started, cannot possibly be ongoing), with examples in (13). There is a high tone on all persons except 3s.

- (13) **à-rǔ-fág** ‘(S)he no longer sweeps (it).’
á-rǔ-fág ‘They no longer sweep (it).’

There are also two negative copulas, one (**ǎń**) to deny existence (‘there isn’t any ...’), the other (**àsíg**) to deny identity (‘that’s not a ...’), as exemplified in (14), from Watters (1981:422).

- (14) **ǎ-gòmé ǎń** **N-jǔg àsíg**
 5-plantain NEG:EXISTENCE 9-elephant NEG:IDENTITY
 ‘There are no plantains (here).’ ‘It is not an elephant.’

9.7 Auxiliaries ‘come’ and ‘go’

There are two verbs **jǐ** ‘to go’ and **bá** ‘to come’ which have a high frequency of usage in what appears to be an auxiliary role. These two verbs are irregular in a variety of interesting ways.

First of all there are morphological irregularities. The verb **jǐ** forms an irregular Imperfective with the suffix **ág**: it adds the full suffix, deleting the vowel of the root to accommodate it: **jág**. The verb **bá**, in turn, forms an irregular Progressive, changing the prefix **kí** to **ké** to create the irregular form **ké-bá**. These irregularities, in a language which has very few irregularities, suggest some kind of grammaticalization in progress, where *go* is somehow related to the notion of Imperfective, and *come* to the notion of Progressive. There is, in fact, curious usage of these forms which also amounts to a kind of syntactic irregularity.

Both verbs are used in their Imperfective forms, for example, when Performative forms are expected, especially when they are used as directional verbs as in (15), from Watters (1981:387).

- (15) a **à-j-ǎg** **à-jî-bôŋ** **ò-čú**
 3s-go-IPFV 3s.PFVgo-pick 14-bitter.leaf
 ‘(S)he went and picked bitter leaf.’
- b **à-bá-g** **à-bâ-gúdì** **ì-sú**
 3s-come-IPFV 3s.PFV-come-sell 19-pepper
 ‘(S)he came and sold peppers.’

The use of the IPFV forms of these verbs before their directional usage with a PFM is an indication that the going and coming are preliminary, incomplete parts of the full event seen as a whole. Where other verbs use a PFM after **tíg** (the marker of future time) these two verbs use IPFV forms, as in (16). The usage indicates the emphasis on orientation, to and from the here and now, that is an integral part of the usage of these two verbs.

- (16) a **tíg** **à-j-ǎg** **ó-jò'**
 FUT 3s-go-IPFV 14-tomorrow
 ‘S/he will go tomorrow.’
- b **tíg** **à-bá-g** **kǎ** **Ń-jù** **é-yǎ**
 FUT 3s-come-IPFV at 9-house 9-your
 ‘S/he will come to your house.’

9.8 Focus

Both the PFM and IPFV aspects have constituent focus forms that are used in relative clauses, clauses with a focus particle, with an interrogative word, and with answers to interrogative words.

The constituent focus PFV has a suffix with a front vowel that assimilates to the height of the first root vowel. The tone on the subject prefixes is low except for the 3p, which is always high, as in (17):

- (17) **à-gbò-é** **á-gbò-é**
 3s-fall-PFM (FOC) 3p-fall-PFM (FOC)
 ‘(S)he fell.’ ‘They fell.’

In the IPFV it is the prefix tone that distinguishes the constituent focus forms. All persons have a high tone followed by a downstep feature, except the 3p which has simply high tone, as in (18):

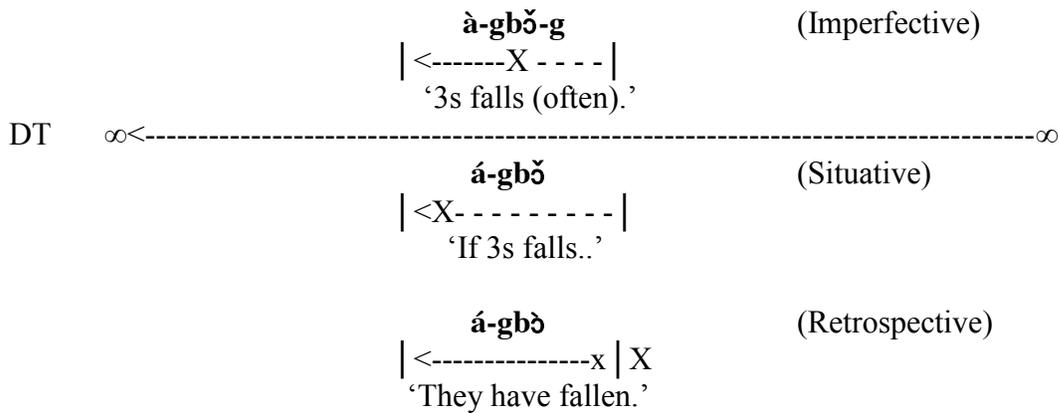
- (18) **á'-gbò-g** **á-gbò-g**
 3s.FOC-fall-IPFV 3p.FOC-fall-IPFV
 ‘(S)he falls, is falling.’ ‘They fall, are falling.’

9.9 Conclusion

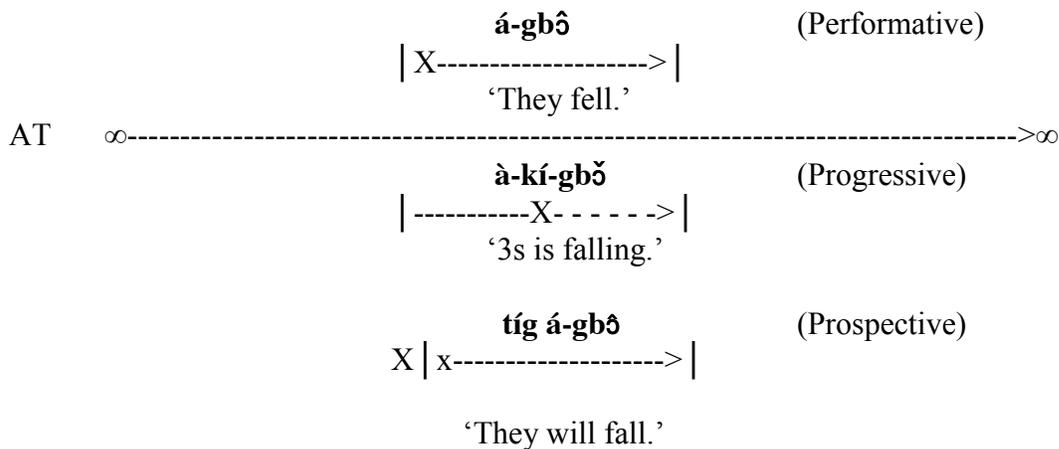
Tone patterns are an important feature in the marking of aspectual and modal contrasts. As illustrated in (3), there are also certain fixed positions: three before the root and one after. The subject prefix occupies the first position before the root, the Progressive prefix **kí** may occupy the second, and the third may be occupied by the Repetitive prefix **kpó**. The final position may be occupied by either the focus suffix of the PFM (a front vowel determined by the height of the first root vowel), or by the IPFV suffix **-ág**.

9.10 Diagrammatic Representations

(i) Forms in Descending Time



(ii) Forms in Ascending Time



10

Ewe

(Kwa, Benue-Kwa)

Derek Nurse

10.1 General

Nearly 2.5 million people (1,615,000 in SE Ghana, 860,000 in southern Togo, where it is the predominant language) speak Ewe as a first language. At least another half million speak it as second language. Ameka (p.c.) regards these figures as suspect and understated.

There are fourteen distinctive vowels: seven oral (/i, e, ε, a, ɔ, o, u/) and the same nasal. Ewe has five phonetic but two phonemic tones (rising and falling are viewed as sequences of H and L). High is marked below, by the acute accent; low is unmarked. Most verb roots are monosyllabic. In this chapter, a hyphen (-) represents a bound inflection, an equals sign (=) represents clitic status. The sources concentrate more on segmental than tonal features, and it is evident in bits of data below that some constructions may involve tonal details that we have overlooked. Ewe is one of Africa's better documented languages. The following relies on Schadeberg (1985) and Pasch (2002), with much advice from Felix Ameka¹.

There appears to be a tradition of terminology for verbal categories in Ewe. We accept some parts of this but have modified other parts in line with the general practice in this book. The Introduction discusses this further.

10.2 Word order

Basic word order is S (AUX) V O, as in:

- (1) a **nyónu=a ɸle dze**
 woman=DEF buy.FAC salt
 'The woman bought salt.'
- b. **é=ná ga ɲútsu lá**
 3s=give.FAC money man DEF
 '3s gave the man money.'
- c. **mí du-na nú ga wóeve me**
 we eat-IPFV thing hour twelve in
 'We usually eat at 12 o'clock.'
- d. **Kofí tási ná akutsá m etsɔ**
 Kofi aunt give.FAC sponge me yesterday
 'Kofi's aunt gave me a sponge yesterday.'

¹ We thank Felix Ameka for his generous help in providing detailed and useful comments on the first draft of this chapter.

- e **é=fiá** **wó** **fiá** **lá**
 3s=show.FAC them chief DEF
 ‘3s showed them to the chief.’

In the Progressive and Prospective aspects, however, the order is S AUX O V, where the V appears to be a verbal noun, so:

- (2) a **me=le** **dó** **wɔ́-ím**
 1s=be.IPFV work do-PRG
 ‘I’m working.’
- b **me=le** **dó** **wɔ́-gé**
 1s=be.IPFV work do-PROS
 ‘I am going to work, intend to work.’
- c **me=no-a** **dó** **wɔ́-ím**
 1s=be.FAC work do-PRG
 ‘I used to be working.’

Basic order can also be altered by emphasis/focus/topicalisation, which involve fronting:

- (3) **edze** **yé** **nyɔ́nu=á** **ɸle**
 salt FOC woman=DEF buy.FAC
 ‘The woman bought salt.’

10.3 Verb structure

All pre-stem material is analytic (AUX above). Ameka (p.c.) says his approach is analytic “with some agglutinative and fusional tendencies”. Schadeberg writes the verb and its satellites more analytically, Pasch more synthetically, presumably reflecting a difference in interpreting cliticised elements. The only bound elements are the suffixes PRG, PROS, and IPFV. All other categories are independent or cliticised. All extensions have been lost and their function largely taken over by “co-verbs” and AUXs. A schema for AUX and V combined, using subject and object pronouns, follows. Some details of cliticisation may be missing.

- (4) (SP=) NEG₁=M₁=A₁ # DIR₁ # M₂ # M₃ # DIR₂ # be # root-A₂ (=OP) # NEG₂

SP (cliticised to the right): 1s **me** (**me** preceding negative **mé** is realized as **nye**. See example 8(b)), 2s **e/ne**, 3s **é/wo** (**ye** logophoric), 1p **míé**, 2p **míe**, 3p **wó**.

NEG₁ and NEG₂ : see §10.7, below.

- M₁: **(l)á** Potential, **ná** Subjunctive
 A₁: **ga** Iterative

DIR₁: **hé** Itive, **ɖa** Altrilocal. These may co-occur.

M₂: **nyá** voice, and certainty (some M₂ and M₃ morphemes are illustrated in (7) i, j and k, below)

M₃: **gbé** immediate, **xa** frustration

DIR₂: **vá** Ventive

A₂: Ø Factative, **-ím** Progressive (locative), **-gé** Prospective, **-(n)a** Imperfective

OP: **m, wo, e, mí, mi, wó**

All authors show additional “augmenting particles” between A₁ and root. In the Progressive and Prospective of intransitive verbs, the root is usually reduplicated. Serial verb constructions consist of two or more verbs juxtaposed asyndetically. Subject, object (and NEG) are only stated once on the first verb. Examples:

- (5) a **é=tró vá tó gbɔ-nye yi aɸé**
he=turn come pass place-my go home
‘He turned, came, passed my place, (and) went home.’
- b **míí ɖa fufu ɖu**
we cook fufu eat
‘We cooked fufu and ate it.’

10.4 Aspects, and a “tense/mood”

This section deals with the six categories called Factative (the traditional term is Aorist), Imperfective (Habitual), Iterative (also Repetitive), Progressive (also Continuous), Prospective (Intentive, Ingressive), Potential (Future/Potential) in the sources, although as will be seen in §10.5, other, less grammaticalised, aspectual, modal, and directional categories occur also. These six are expressed as follows:

(6) Perfective, unmarked:

- a **é=tó ɓu=a**
3s=stop.FAC car=DEF
‘3s stopped the car.’
- b **fufu ti=m**
fufu tire.FAC=me
‘I am fed up with fufu.’
- c **é-ná ga ɲútsu lá**
3s-give.FAC money man DEF
‘3s gave the man money.’

Imperfective, suffixal **-(n)a**:

d **me=wɔ-a** **dɔ́**
1s=do-IPFV work
'I work.'

e **ame** **kú-ná**
person die-IPFV
'Humans are mortal.'

Iterative, pre-verb **ga**:

f **me=ga** **yi**
1s=ITR go
'I went again.'

g **é=ga** **le** **dɔ́** **wɔ-ím**
3s=ITR be work do-PRG
'3s is still working.'

h **mé=ga** **yi** **o**
NEG=ITR go NEG
'Don't go!'

Progressive, 'be' and **-m**:

i **me=le** **dɔ́** **wɔ-ím**
1s=be.IPFV work do-PRG
'I am working.'

j **me=no** **dɔ́** **wɔ-ím**
1s=be.FAC work do-PRG
'I was working.'

Prospective, 'be' and **-gé**:

k **me=le** **dɔ́** **wɔ-gé**
1s=be.IPFV work do-PROS
'I intend/am about to work.'

l **tsi** **le** **dzadza-gé**
water be rain-PROS
'It's about to rain.'

Potential, pre-verb (**I**a):

m	m=a	yi
	1s=POT	go
	'I'll go.'	

Pasch (2002:42) says that when the “aorist” is used with stative/inchoative verbs, it denotes the result of a past action, and thus is translated typically by using an English present (6b); with dynamic verbs, it typically denotes a past action (6a). In fact, she has examples where the translation has English past and present but does not comment further, as in (6c). She also says that other authors have claimed that the aorist characterizes situations as “perfectiv/accompli”. It seems to us that this is a classic factative and we will use that label. Of the “habitual”, she says that it is used of situations that occur regularly, repeatedly and in the same way. Since structurally (suffix, or lack thereof) and functionally this contrasts with the preceding category, we refer to it as Imperfective (6d, e).

With Factative, the Iterative refers to a past repeated once (6f), but with Progressive Pasch translates it as ‘be still verbing’ (6g). These might be best labeled by the general term Iterative. Iterative **ga** also occurs in negative commands, as in (6h), above. This resembles the use of suffixal (imperfective) **-ag-** in some Bantu languages.

The Progressive refers to a situation ongoing at the time of reference (6i, j). Pasch says the Prospective expresses that the speaker intends to do something or that the speaker is convinced that a situation will take place (6k, l). Traditionally and by Schadeberg, implicitly by Pasch, the **a**-form has been termed a Future (tense). However, Ameka calls it Potential (mood), following a new analysis².

This points up an interesting issue: many languages, Benue-Congo and also other non-Benue-Congo languages in West Africa, have been analysed as only having tenses in the future, that is, as having one or more future “tenses”, but is this a correct analysis? Worldwide, in languages with a single tense contrast, it is predominantly past versus non-past, not future versus non-future. So is this a West African areal feature or is it the result of incomplete or incorrect analysis? Ameka (p.c.) feels the analysis as a Future tense in Ewe, at least, is incorrect and that it is better analysed as Potential mood, because “what we are calling the ‘prospective’ is an imperfective aspect construction that is used to express imminent future, purposive and approximative and attemptive meanings. The main argument for claiming that (**I**)**a** is not a future marker is that it can be used with both future and past time reference with ‘potential’ meaning. Furthermore, it is not predictive. There is a coercive reading of the future in some contexts but that is not the invariant meaning of the form.”

Given that Ameka and Essegbey are linguists and native Ewe speakers, we follow their lead here, and replace Future (tense) by Potential (mood). Consequently Ewe should be considered an aspect, not a tense-aspect, language.

² Ameka (2008); Essegbey (2008).

10.5 Other categories

It can be seen in (4) that the Ewe verbal complex encodes other verbal categories beside aspect. We cannot discuss them all here and restrict ourselves to directionals, focus, relativisation, imperative, mood, and voice. Each is discussed briefly below, and then all are exemplified in (7).

10.5.1 Directionals

The sources give **hé/há** (7d) Itive/serial, **ɔa** (7b,c) Altrilocal/goal, **vá/vé** Ventive (7a), and maybe others (e.g. **yi**, 7h) show the function of these, although not all in the template position of the verb complex.

10.5.2 Focus

Focused and topicalised constituents are moved left or fronted and often involve a particle (**é, yé**) after the constituent affected (7e)). Only one constituent can be focused.

10.5.3 Relativisers

All relativised clauses, whether they involve subject or object of the relative clause, are flanked by post-nominal *si* and optional clause final **lá**³ (7f, g).

10.5.4 Imperative

The sources distinguish Imperative (2nd persons s and p) from Jussive (1st and 3rd). The 2nd person singular consists of the bare verb stem with certain tonal modifications (Schadeberg 1985:20). Jussives have a special set of subject pronouns (all high-toned except one) and are (optionally) preceded by **ná/né**. See (7h).

10.5.5 Mood

Beside **ná/né**, which Ameka calls subjunctive marker, there are other particles at M₂ and M₃ which might be better labelled modals, and translate roughly by English terms such as “bother/frustration, immediate, certainty, alleviating”. See (7i, j).

10.5.6 Voice

Ameka (2005) considers one of the functions of **nyá** (Ameka 2005) to be voice-related (illustrated in (7k), below), voice being defined as a strategy “for attaching the various participant roles (such as agent, patient, recipient) to the various grammatical relations (subject, object, etc)” (Trask 1997:234). **Nyá** is related to the verb ‘know’.

³ In certain phonological contexts the second vowel of the preceding noun has a high tone.

- (7) a **Kofi mé=mli kpé=á vè o**
Kofi NEG=roll.FAC stone=DEF come NEG
'Kofi didn't roll the stone here.'
- b **wó=nyã=e dǎ kaba**
3p=chase.FAC=3s away quickly
'They chased 3s away quickly.'
- c **nyǎnu=a yi fíásé me dǎ=ɔle taku**
woman=DEF go.FAC shop in there=bought shawl
'The woman went into a shop and bought a shawl'
- d **wó=á=e tsi á=dú nú á-há mló anyí**
they=POT=bathe water POT=eat thing POT=lie lie earth
'They will bathe, eat, and lie down'
- e **nútsu=lá é me=wɔ dɔ ná**
man=DEF FOC 1s=do.FAC work for
'I worked for the man.'
- f **atí si me=dó lá kú**
tree REL 1s=plant.FAC REL die.FAC
'The tree which I planted is dead.'
- g **amé si kpó da=lá lá né vá wu=i**
person REL see.FAC snake=DEF REL SBJ come kill-it
'Person who saw the snake should come and kill it.'
- h **yi** 'Go!(s)' **mi=yi** 'Go!(p)'
me=ga yi o 'Don't go!(s)' **mi (mé)=ga yi o** 'Don't go!(p)'
(na=)má=yi 'Let me go, I should go.'
(na=)yi 'You (s) should go.'
(né=)yi or (ná=)yi 'He should go.'
na=mf=dzó 'Let's depart.'
mé=ná=ga yi o 'He shouldn't go.'
mí=má=ga yi o 'Let's not go.'
- i **me=xa le atikɛ wɔ-ím**
1s=in.vain be medicine take-PRG
'I'm taking medicine for nothing.'

j **dɔlelé=á** **ká** **bobo** **víé**
sickness=DEF soften.FAC light slightly
‘The sickness has improved slightly.’

k **nyó=a** **nyá** **kpó-ná (ná-m)**
woman=DEF nyá see-IPFV (DAT-1s)
‘The woman is beautiful (to me).’
Lit: ‘the woman is seeable (to me)’

Compare to **me-kpó ny** **nyónu=a**
1s-see.FAC woman=DEF
‘I saw the woman.’

10.6 Negation

All negation is encoded by **mé**, following the subject and preceding all verbal constituents, and clause-final **o**:

(8) a **atí** **lá** **mé** **kó** **o**
tree DEF NEG tall NEG
‘The tree is not tall.’

b **nye** **mé** **ga** **le** **tsitsi-fm** **o**
1s NEG ITR be.IPFV growgrow-PRG NEG
‘I’m no longer growing.’

c **mé** **ga** **yi** **o**
NEG ITR go NEG
‘Don’t go!’

d **wó** **má** **ga** **yi** **o**
3p NEG.POT ITR go NEG (ma < me+a)
‘They shouldn’t go.’

10.7 ‘Be’, “co-verbs”, auxiliaries

The PRG and PROS consist of ‘be’ and a nominalised verb with suffix. **Le** (Imperfective ‘be’) is used to refer to the present; **no** (Perfective ‘be’) is used to refer to the non-present (past or future). Pasch shows **no** as an independent verb, variously translated as ‘stay’ or ‘remain’ (verweilen)⁴. There are several other verbs (of motion) which belong in this category but are not discussed here.

A small set of words, referred to as “co-verbs” or “verbids”, function both as verbs or prepositions: **le** ‘be somewhere, at/in’, **tsó** ‘come from, from’, **ná** ‘give, to/for’, **qé** ‘reach, towards’, **tó** ‘pass, through’. So:

⁴ **Le** and **no** ‘be and condition, quality, place, time’ contrast with **nye** ‘equational be’.

- (9) a **é=ná ga ηútsu lá**
 3s=give.FAC money man DEF
 ‘3s gave the man money.’
- b **é=fi ga ná=m**
 3s=steal.FAC money for=me
 ‘3s stole money for-me.’
- c **é=le avě=a me**
 3s=be woods=DEF in
 ‘3s is in the woods.’
- d **é=ku le ga etõ me**
 3s=die at hour three in
 ‘3s died at 3 o’clock.’

Finally, other verbs occur in constructions similar to those involving serial verbs but the details differ somewhat, so they are treated differently: **yi** ‘go’ (direction there), **vá** ‘come’ (direction here), **vɔ** ‘finish’ (completive), **kpɔ** ‘see’ (‘already’, ‘yet’), and others. Thus:

- (10) a **é=té zikpui lá yi**
 3s=drag.FAC chair DEF go
 ‘3s dragged the chair away’
- b **Kofi mé=mli kpé=á vê o**
 Kofi NEG=roll.FAC stone=DEF come NEG (vê < va and 3s)
 ‘Kofi didn’t roll the stone this way.’
- c **é=wɔ=e vɔ**
 3s=do.FAC=it finish
 ‘3s has finished it.’
- d **égbe nye=mé=du kpɔ o**
 today 1s=NEG=eat.FAC yet NEG
 ‘Today I have eaten nothing yet.’

11

Fula

(Northern, Senegambian, Atlantic)

Sarah Rose

11.1 General

Fula (aka Fulfulde¹) has proven to be a classification puzzle, with some early scholars judging it more Semitic than Niger-Congo². The language is widely spoken in a continuum from West to East in countries including Senegal, Mauritania, Gambia, Guinea, Guinea Bissau, Mali, Burkina Faso, northern Benin, Nigeria, Niger, Chad, Cameroon, with some speakers reported as far East as Sudan.

Estimates of the number of speakers vary wildly. Gordon (2005) puts the number at approximately four and a half million, but suggests that in total, speakers may number as high as twelve million. The UCLA Language Materials Project (www.lmp.ucla.edu) puts the number at between 12-15 million speakers.

Estimates of dialects vary from two (as in Taylor (1953)) to six (as in Arnott (1970:3)). Arnott's monograph is based on the Gombe dialect, spoken in Northeastern Nigeria, which he considers "more typical of Fula as a whole" (1970:4). Unless otherwise indicated, we refer to the latter in this chapter.

Fula is a five vowel language (with contrasting long vowels). There are no tones. However, Arnott marks what he terms the "salient syllable" with the diacritic (ˈ) over the relevant vowel (1970:63, 64). The consonant system contains 28 members, including four "glottalized" consonants (**ɓ**, **ɗ**, **ɗy**, and **ʔ**)³. The language allows geminated consonants and has a full array of pre-nasalized stops.

Fula boasts a complex and unusual system of suffixally-marked noun class and concord. Each class suffix has several allomorphs (or "grades" as Arnott calls them (1970:88-89)), which combine with stems of the same "grade". This fact has an effect on agreement morphology: since the "grade" of the suffix is determined by the individual stem, agreement phrases show suffixes of the same class, but not necessarily the same form:

- (1) **loo-ŋgel** **ɓalee-yel**
pot-class 3 (smallness singular) black-class 3 (smallness singular)
'a small black pot' (Arnott 1970:92, Appendix 5)

- (2) **Examples of the Noun Class System of Fula**
(after Arnott 1970:75, Appendix 4):

¹ Depending on country of speakers, the language is also variously known as Pulaar, Pular, Fulbe, Fulani, among others.

² Even today, says Wilson (1989:87), " eminent libraries catalogue Fula under 'Hamitic'". This early identification (as by Meinhof 1912) was clearly wrong-minded. Childs (2003:35) goes so far as to call it "shameful". See Sanders (1996) for the history of, and rationale for, the "Hamitic Hypothesis".

³ /ʔ/ is a glottal stop in slow speech; in normal speech, it may be realized as a "glottal creak" in initial position, as an intervocalic glide in medial position (Arnott 1970:385).

1s-buy-“General Past Active” cow (DO)
‘I bought/have bought a cow.’ (Adapted from Arnott 1970:319)

b. Two pronominal objects:

be-hokk-ii-no-mo-dum

3p-give-“General Past Active”-shifter-IO (him)-DO (it)
‘They had given him it.’

However, in the case where both a (pronominal) “object element” and a “noun object” occur, “the object element (being part of the “verbal complex”) always precedes the noun object” (Arnott 1970:175):

c. Two objects (one pronoun, one NP object):

mi-hokk-ii-ndi

1s-give-“General Past Active”-DO (it = **gawri** ‘corn’) horse (IO) my
‘I gave it to my horse.’

puccu ’am

Predications with three objects are possible, but rare, and invariably involves a verbal extension which ‘licenses’ the third object. Here, the noun “care” is licensed by the extension **-ir-**:

d. Three NP objects:

’o-mabb-it-ir-an-ii

3s-close-reversive-“modal”⁷-dative-“General Past Active”
‘He carefully opened the door for Bello.’ (Arnott 1970:27)

Bello yolnde hakkilo

Bello door care

So-called “relative tenses” (Arnott 1970) may appear in all three voices. They generally occur in subordinate clauses, resultative clauses, after certain particles including question particles, and in reported speech. In relative tenses, the past perfective (“General Past Active”) suffix **-ii** is replaced by **-u** and the order of subject and verb can be reversed in some, but not all, persons:

- (5) a. **ndaa nagge (ŋge) shood-u-mi**
this cow (which) buy-“Relative Past Active”-1s
‘This is the cow (which) I bought.’ (Arnott 1970:319)

Compare: **mi-soodii nagge** (‘I bought a cow.’)

’o-hokkii-no-mo-dum ‘he had given him it’. Not all authors who write on Fula do this: most write subject pronouns as independent items. All other tense or aspect markers, auxiliary-type elements **don** and **’e** as well as extensions, are not segmented by Arnott. I have added hyphens between such morphemes to clarify morphological analysis for the reader.

⁷Arnott’s “modal” = Instrumental.

The S V order is reversed in certain persons in subordinate clauses in the “Relative Future” as well:

- (6) **wi’-am mo nodd-ay-mi**
 tell-me whom call-“FUT”-1s
 ‘Tell me whom I am to call.’ (adapted from Arnott 1970:149)

11.3 Verb Structure

Fula has an extremely complex verbal system. The sheer number of possible forms is daunting: there are three voices (Active, Middle and Passive, all marked at final), several moods, fifteen different forms (Arnott’s “tenses” 1970:4), and nineteen radical extensions. The default template is given below (but see (12)):

- (7) (NEG) (SM)-root-(EXT)-AMV(NEG)-(no)-(IO)-(DO)-(LOC/INST)

A minimal finite verb form (such as the Imperative⁸) involves a root with suffixal AMVN markers (see §11.9 for Negatives). In these minimal Imperatives, the category *voice* must be specified (thus **-u** for active voice Imperative, **-a** for middle voice Imperative. There is no passive Imperative):

- | | | |
|-----|--------------------------|----------------------------|
| (8) | wart-u | waal-a |
| | return-Imperative Active | lie down-Imperative Middle |
| | ‘Come back!’ | ‘Lie down!’ |

Several objects may occur:

- (9) **hokk-u-mo-nga**
 give-Imperative Active-him(IO)-it(DO)
 ‘Give him it!’

As above, if the “shifter”-**no-** appears, it is located after the AMVN suffix, but before any pronominal objects (compare the syntax with **-don-** or **-’e**, discussed below).

- (10) a **mi-yaaf-oto-no-mo**
 1s-forgive-“Future Middle”-shifter-him (DO)
 ‘I was going to forgive him.’ (Arnott 1970: 229)

⁸ Imperatives are possible in several “tenses”/aspects, including an habitual (actually, a future used as an habitual) imperative: **wolw-at-ay** ‘keep on talking!’, but only two voices, there being no Passive Imperative (Arnott 1970:248). Other modal forms include a desiderative (suffixes **-u**, **-o**, or **-Ø**): **’Alla wall-am** ‘God help me’; **’Alla hinno-mo**, **faranoo-mo** ‘God have pity on him and pardon him’, and a subjunctive (voice-related suffixes **-a/-u**, **-oo/-o**, **-ee/-e**, or **-Ø**) with a wide range of meanings and uses, including injunctions: **’o-wart-a** ‘He is to come back!’. The subjunctive occurs regularly in subordinate clauses, often introduced by particles such as **haa** or **sey** (borrowed from Hausa): **haa mi-nodd-a Bello** ‘Let me call Bello’; **sey ’o-nodd-ee** ‘He should be called’ (Arnott 1970:299-315).

- b **be-hokk-ii-no-mo-dum**
 3p-give-“General Past Active”-shifter-him(IO)-it(DO)
 ‘They had given him it.’
- c **’o-habb-ir-ii-mo-ngo**
 3s-tie-“modal”-“General Past Active”-him (DO)-it
 ‘He tied him up with it.’

11.3.1 Extensions⁹

Arnott (1970:333) lists 19 different extensions, located between the verbal root and the AMVN suffix. There are very few limitations on which extensions may combine; however, there are certain restrictions on the *order* in which they may occur. Arnott suggests that the order (-t- > -d- > -n- > -r- > followed by -an- > -law- > -oy-) is phonologically not semantically motivated (1970: 334, 366)¹⁰.

- (11) Possible combinations and ordering of extensions
 (adapted slightly from Arnott 1970:367)

’o-mabb-ii yolnde	‘He shut the door.’	
’o-mabb-it-ii yolnde	‘He <i>opened</i> the door.’	-it- (reversive)
’o-mabb-it-id-ii joldde (fuu)	‘He <i>opened all</i> the doors.’	-id- (comprehensive)
’o-mabb-it-id-ir-an-oy-ii-mo	he-close-rev.-comprehensive-“modal”-dative-distantive-past-him doors slowly	
	‘He went and opened all the doors slowly for him.’	

The more productive of Fula extensions are exemplified below. Note that certain extensions occur only in certain voices. Despite a substantial amount of shared allomorphy (as in the reversive, repetitive, reflexive and retaliative), these extensions do not lend themselves to reduction to a common meaning.

Reversive (allomorphs **-t/-it/-ut-**) (used with all voices)

fib-a ‘tie’	>	fib-t-a ‘untie’
mabb-a ‘close’	>	mabb-it-a ‘open’
hufn-o ‘put on a cap’	>	hufn-it-o ‘take off a cap’ ¹¹

⁹ There are several derivational elements which are not discussed here, for reasons of space. A single example will suffice: the element **-w** is productively used to derive stative verbs: **balw** ‘be black’, **nyaw** ‘be ill’, **tow** ‘be tall’, **foow** ‘be hot’, **nayw** ‘be old’, **ranw** ‘be white’, **feww** ‘be cool’, **heew** ‘be full’. Even **wolw-** ‘talk’ apparently bears this apparently separable morpheme: **wol-it-o** ‘speak to self’ (root-reflexive-middle), **wol-d-a** ‘speak with’ (root-associative-active).

¹⁰ See Hyman (2004:86) for a discussion of the order of these extensions vis-à-vis (Proto-) Bantu.

¹¹ Here, the FV alone marks middle voice. The transitive version meaning ‘put a cap on (somebody else)’ is **hufna** (Arnott 1970:340, nt.1), reflecting the final vowels associated with voice: **-a, -o, -e** (active, middle, passive, respectively) (Arnott 1970:259, 260). Thus:

war-a (come-active) **jood-o** (sit down-middle) **weel-e** (be hungry-passive)

Repetitive (allomorphs **-t-/-it-/-ut-**) (majority of uses are middle)

ɗaan-o ‘go to sleep’	>	ɗaan-t-o ‘go to sleep again’
loot-a ‘wash’	>	loot-it-o ‘rewash’

This suffix is often used in close proximity to the simple radical, as in:

’o-jali, ’o-jalitii ‘He laughed, and laughed again’ (Arnott 1970:341).

Reflexive (allomorphs **-t-/-it-**) (middle only)

war-a ‘kill’	>	war-t-o ‘kill oneself’
jal-a ‘laugh’	>	jal-it-o ‘laugh at oneself’

Retaliative (allomorphs **-t-/-it-**) (middle only)

lat-a ‘kick’	>	lat-it-o ‘kick back’
---------------------	---	-----------------------------

This suffix occurs regularly in these types of sentences: **tò ’o-fiyii-yam, mi-fiitoto-mo** ‘if he hits me, I’ll hit him back’ (Arnott 1970:343).

Iterative (reduplication and **-i-/-in-**) (all voices)

war-a ‘come’	>	war-i-war-in-a ‘keep on coming’
darn-a ‘stop’	>	darn-i-darn-in-a ‘keep on stopping’

11.4 Aspect, Mood, Voice, Negative (AMVN)

Despite Arnott’s tense-heavy terminology (“Past”, “Future”), I believe Fula to be an aspect-prominent language, and I have analysed it as such. Nevertheless, I maintain an open mind on the possibility that there may be both a future tense (marked by **-ay-/-t-**, etc) and a past tense (marked by the shifter **-no-**). I believe the form which Arnott identifies as “Vague Future” to be modal, and his “Emphatic Past” to be verbal focus.

Fula verbal endings mark a (not-easily-segmentable) combination of aspect, mood, voice and negative. Because Fula verbal endings involve quite a bit of imbrication, I gloss certain such endings as AMVN. Because Fula has three voices, most examples are given in a tabular form, which I believe best presents the relevant contrasts. For a quick overview, the reader is referred to the matrix in §11.11 which provides a summary of major categories.

It is possible to divide Fula verbs into two (morphologically based) categories: “simple” verbs which involve a single main verb, and “complex” verbs which involve a main verb and a grammaticalized auxiliary (copular) element (either **-ɗon-** or **-’e-**). Aspectual divisions do not break down into such easy categories, however. Whereas all the “complex” forms may be considered imperfective (with subsets continuous and habitual), included in the “simple” verbs are both perfectives (the “General Past”), and some imperatives; other imperatives and the

“Future” are habitual. The “Stative” is a combination of both perfective and imperfective. All are exemplified below.

The “shifter” **-no-** is used in both simple and complex forms, but in different locations: after the lexical verb in simple predications, after the auxiliary element in the complex. The position of the object remains the same in both aspects: after the lexical verb.

11.5 Simple forms (forms which do *not* contain an auxiliary element)

11.5.1 Perfective aspect

a. “General Past Active/Middle/Passive”¹²

These forms denote “a completed action, or a completed process” (Arnott 1970:262). (All examples adapted from Arnott’s Appendix 13):

ACTIVE (-ii)	MIDDLE (-ake)	PASSIVE (-aama)
'o-loot-ii 'He washed (someone)'	'o-loot-ake 'He washed (himself)'	o-loot-aa-ma 'He was washed'
NEG ACTIVE (- áa-yi)	NEG MIDDLE (- áa-ki)	NEG PASSIVE (- áa-ka)
'o-loot-aa-yi 'He didn't wash (anyone)'	'o-loot-áa-ki 'He didn't wash (himself)'	'o-loot-áa-ka 'He has not been/ isn't washed'

If the “shifter” **-no** is added to this form, it produces a pluperfect. Thus:

- (12) a **mi-wind-ii**
1s-write-PFV/PFT
'I wrote/have written.'
- b **mi-wind-ii-no**
1s-write-PFV/PFT-“shifter”
'I had written.'

b. Imperatives

The Perfective Imperatives (and their negative forms (= prohibitives)) are exemplified below:

ACTIVE (-u/-Ø)	MIDDLE (-a)	PASSIVE (-aama)
wind-u or wind 'Write!'	jooŋ-a 'Sit down!'	No form
NEG (táa + -u)	NEG (táa + -a)	

¹² The “Emphatic Past” is also perfective. For this form, see under Focus.

táa wind-u/wind ‘Don’t write!’	táa jooǰ-a ‘Don’t sit down!’	
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11.5.2 Imperfective aspect

a “Future”

What Arnott terms the “Future” occurs in all three voices, again each with its own endings. It may have both future tense value or habitual/gnomic aspectual meaning, denoting a habit or normal practice (**naange fuf-ay** ‘the sun rises’). Both meanings may be subsumed under the banner of “non-completeness” (Arnott 1970:270). Note that there is often a meaning change in the negative middle and passive: e.g. negative middle future **’o-loot-áako** means ‘he doesn’t wash’, not * ‘he won’t wash’; similarly, negative passive future **’o-loot-áake** means ‘he isn’t being washed’ not * ‘he won’t be washed’.

ACTIVE (-ay/-[e]t)	MIDDLE (-[o]to/-[e]t)	PASSIVE (-[e]te)
’o-loot-ay ‘He will, is about to wash, washes habitually’	’o-loot-(o)to ‘He will wash’	’o-loot-(e)te ‘He will be washed’
NEG ACTIVE (-[a]taa)	NEG MIDDLE (-[a]taako)	NEG PASSIVE (-[a]taake)
’o-loot-átaa ‘He won’t wash’	’o-loot-áako ‘He doesn’t wash’	’o-loot-áake ‘He isn’t being washed’

Taylor (1953:76) provides the following example using the alternate Future marker with **-t-**.

- (13) **mi-wind-ata**
1s-write-FUT/IPFV
‘I shall write.’

11.6 Complex Forms (forms which do contain an auxiliary element)

11.6.1 Imperfective aspect

All complex forms involve grammaticalized elements, (either **ǰon** or **’e**) in complementary distribution, with **ǰon** far more common than **’e**, and “indicate an action or a process taking place at the time of the utterance” (Arnott 1970:282). There is a positional difference between the two: **ǰon** follows the SM, whereas **’e** precedes it (see template in (14), below. According to Arnott, there is no meaning difference between the two. There may be a syntactic difference: **’e** seems far more common in subordinate clauses. The templatic order for these forms is as follows:

- (14) SM-**ǰon**-(no)-root-A/M/V/N-(O) or ’e-SM-(no)-root-A/M/V/N-(O)

Arnott does not identify these two auxiliary elements, other than to say they are “part of the subject element in the Continuous and Stative tenses” (1970:32), nor does he segment them

from the person markers (although they are clearly segmentable, as I hope to have clarified in the examples). Some authors (e.g. Taylor 1953) do write the element **ɗon** as a separate word. Given the position, function, stress patterns¹³ and meaning of these items, I interpret them as grammaticalized copular/auxiliary-type elements. Thus, in the examples, I have glossed both **ɗon** and 'e as AUX and have segmented Arnott's examples to highlight their morphemic structure within the verb.

a. Imperfective complex forms using auxiliary ɗon

Arnott calls a virtually identical independent lexical item **ɗon** 'exists', 'is present'¹⁴ a "stabilizing element"(1970:32) which occurs as an independent verb in such predications as:

- (15) **deptere ɗön** 'There is a book.'
Bello ɗön 'Bello is present, is here.'
mi ɗön-no 'I was present.'

He bases his claim that the independent verb **ɗon** (as in (15)) is not the same **ɗon** as in the complex forms on intonational criteria: "the latter is pronounced on a level pitch (at any rate by my informants), whereas the stabilizing element **ɗon** is marked by a falling pitch" (1970:32, nt.12). Elsewhere, he identifies an independent, morphologically identical item **ɗon** as a locative "adverbial" meaning 'there (at the place in question)'(1970:418). I assume that they are identical. Forms with this auxiliary, in combination with Final Vowel **-a** in the active voice (examples (16), (17) and (18a), **-oo/-o**, **-ee/-e** in middle and passive, respectively (as in (18b, c), represent ongoing, progressive actions:

- (16) **mi-ɗon-wind-a**
 1s-AUX-write-PROG
 'I am writing.' (lit: 'I- am there -(I) writ(ing)')

If the shifter is added, a past reference results. (Note the position of the shifter):

- (17) **mi-ɗon-no-wind-a**
 1s-AUX-shifter-write-PROG
 'I was writing' (lit: 'I was there I writing')

Again, the time frame and meaning interact with voice:

- (18) a ACTIVE **'o-ɗon-war-a**
 3s-AUX-come-ACT.PROG
 'He is coming.'

¹³ Generally, it is the first syllable of the verbal radical which is the "salient syllable" of the verbal complex (Arnott 1970:229). In the stative and continuous forms, the auxiliary element **ɗon** steals this distinction away from the (following main) verb.

¹⁴ As opposed to **ton** 'is present yonder' : **'o tön haande** 'he is there today'

'o-don-no-mabb-it-a-dum
 3s-AUX-shifter-close-reversive-ACT.PROG-it
 'He was opening it.' (Arnott 1970: 229)

- b MIDDLE **'o-don-jood-oo**
 3s-AUX-sit.down-MID.PROG
 'He is in the process of sitting down.'
- c PASSIVE **a-don-nodd-ee**
 2s-AUX-call-PASS.PROG
 'You are being called.'

Arnott notes (1970:282) that the tendency to use these forms with habitual meaning is especially pronounced in Fulani speakers who are also fluent in Hausa.

b. Imperfective complex forms using auxiliary 'e

'e is identified as a preposition meaning 'with' (Arnott 1970:142) or 'in the vicinity of' (1970:420). Forms with this particular auxiliary are used in answer to the question 'What does he do for a living?'. Compare the progressive form with **don mi-don-wind-a** 'I am writing.'

- (19) **'e-mi-wind-a**
 AUX-1s-write-IPFV
 'I write.'

Although Arnott claims that there is no difference between the two AUX's, 'e seems far more common in subordinate structures, where the (following) clause, introduced by 'e, is typically translated as a verbal noun:

- (20) a **mi-yi'-ii-mo 'e-mo-jood-ii**
 1s-see-PFV-him AUX-3s-sit.down-MID.PFV
 'I saw him **sitting** (= 'having sat') down.' (Arnott 1970:285)
- b **mi-taw-ii-be 'e-be-kab-a**
 1s-find-PFV-them AUX-3p-fight-ACT.IPFV
 'I found them **fighting**.' (Arnott 1970:285)
- c **'a-taw-ay-be 'e-be-ngin-oo**
 2s-find-FUT-them AUX-3p-swim-MID.IPFV
 'You will find them **swimming**.' (Arnott 1970:282)

c. Mixed aspects

What Arnott refers to as the "stative" combines perfective and imperfective aspects. It always includes a perfective aspect marker appended to the main verb (-i (active), -ii (middle), -aa (passive), and an auxiliary element. It is "used to indicate a state, position, or situation as the

result of the action or process indicated by the radical” (Arnott 1970:279). Notice that the middle voice is especially common in this form. In the active voice, the meaning is a state which may be temporary, as in: **'o-don-tikki** ‘He’s in a temper’. (Compare the simple perfective form **'o-tikk-ii** ‘He’s angry (has become angry).’)

The mixed aspect forms can refer to any time frame (present, past or future), with the interpretation often depending on which voice is used, and/or other sentential components such as the adverbial **wakkati nden** ‘then’ (= past) (21b) or the future marker **-ay-** in the main clause (21c).

- (21) a present reference **'o-don-suud-ii-yam**
 3s-AUX-hide-MID.PFV-you
 ‘He is in hiding from you.’
- 'o-don-habb-aa**
 3s-AUX-tie/bind-PASS.PFV
 ‘He is bound, tied up.’
- b past reference **wakkati nden, 'o-don-jood-ii**
 time that, 3s-AUX-sit-MID.PFV
 ‘At the time, he was seated.’
- wakkati nden, 'o-don-no-jood-ii**
 time that, 3s-AUX-shifter-sit-MID.PFV
 ‘At the time, he was seated (but later got up).’
- mi-taw-ii-be 'e-be-mbaal-ii**
 1s-find-ACT.PFV-3p AUX-3p-lie.down.MID.PFV
 ‘I found them lying down.’
 (Lit: ‘I found them, there they had lain down’)
- c future reference **tò be-don-njood-ii, mi-wi'ay-be**
 when 3p-AUX-sit-MID.PFV, 1s-tell.FUT-3p
 ‘When they are seated, I’ll tell them.’
- 'a-taw-ay-mo 'e-mo-daan-ii**
 2s-find-FUT-3p AUX-3s-sleep-MID.PFV
 ‘You will find him asleep.’

In these mixed forms, AMVN markers and objects follow the main verb, not the AUX:

- (22) **'o-don-mammb-ii-ngel**
 3s-AUX-embrace-MID.PFV-it
 ‘She is embracing it.’

11.7 Mood

Fula has a subjunctive (with forms in all three voices) whose uses are “numerous and varied” (Arnott 1976:299). The use of the subjunctive may indicate an injunctive form:

- (24) a **ngadd-aa-ɗum**
Ø-bring-(active SBJ)-it
‘Come on, bring it along!’ (1976:300)
- b **be-njooɗ-oo**
3p-sit.down-(middle SBJ)
‘They are to sit down.’

For prohibitions, the sentence initial particle **tó** is used:

- c **tó be-njooɗ-oo**
NEG 3p-sit.down-(middle SBJ)
‘They are not to sit down.’

The subjunctive may express a wish or a prayer:

- (25) **njuut-aa balɗe**
Ø-be.long-(active SBJ) days
‘Long may you live!’ (= ‘may you be long in days’)

Subjunctives also appear with certain particles to indicate such things as requests for permission (with particle **haa**) (26a), or obligation (with particle **sey**)¹⁵ (26b) :

- (26) a **haa mi-nodd-a Bello**
PRT 1s-call-(active SBJ) Bello
‘Let me call Bello.’ (Arnott 1976:302)
- b **sey ’o-nodd-ee**
PRT 3s-call-(passive SBJ)
‘He should be called.’ (Arnott 1976:302)

The subjunctive occurs often in subordinate clauses following a verb **haan-** meaning ‘be appropriate’, where the first verb may be considered the main verb, similar to French *il faut que* +SBJ:

- (27) **haan-ii ’yam-en moodibbo**
be.appropriate-PFV ask-2INCL (SBJ) teacher
‘We ought to ask the teacher.’ (= ‘It is appropriate that we should ask the teacher’)
(Arnott 1976:311)

¹⁵ Arnott says that this particle is “clearly borrowed from Hausa” (1976:302).

What Arnott (1970:275ff) calls the “Vague Future” I interpret as a modal. It occurs much less frequently than the ‘plain’ future, and in subordinate clauses. Its use implies “a likelihood or vague possibility rather than a prospect or intention” (Arnott 1970:275), and, occasionally, a vague threat. Arnott says (1970:199) that the **-ma** element is best treated as part of the suffix and not as a separate particle, as an object element follows in such predications as **mi-nodd-uma-mo** ‘I’ll call him’. I think **-ma** is better analyzed as a modal particle.

ACTIVE (-u-ma)	MIDDLE (-oo-ma)	PASSIVE (-ee-ma)
Yahu ’a-yi’uma ‘Off you go (and) you’ll see.’ (Arnott 1970:275)	tò ’a-’yeenggii do’o, ’a-do’y’yooma ‘If you climb up there, you’ll fall.’	tò ’o-wartii do’o, ’o-nanggeema ‘If he comes back here, he’s liable to be caught.’

11.8 Non-finite forms

In addition to a large number of possible finite verb forms, Fula has an extensive array of non-finite forms (infinitives and participles). Arnott (1970:18) indicates that these “hybrid” forms are marked for both verbal and nominal inflection.

- (28) Infinitives **loot-u-ki** ‘to wash’ (ACTIVE)
 loot-aa-ki ‘to wash oneself, get washed’ (MIDDLE)
 loot-ee-ki ‘to be washed’ (PASSIVE)
- Participles **loot-u-ɗo** ‘(one) who has washed (something)’ (ACTIVE)
 loot-otoo-ɗo ‘(one) who will wash himself’ (MIDDLE)
 loot-aa-ɗo ‘(one) who has been washed’ (PASSIVE)

11.9 Negation

Fula has several negation strategies. The default (primary) negative appears at suffix, incorporated into the AMVN markers as in the following examples:

- (29) **’o-loot-ii** ‘He washed (someone).’ > **’o-loot-áayi** ‘He didn’t wash.’
’o-loot-ake ‘He washed (himself).’ > **’o-loot-áaki** ‘H didn’t wash (self).’
’o-loot-aama ‘He was washed.’ > **’o-loot-áaka** ‘He has not been/isn’t washed.’
’o-loot-(e)te ‘He will be washed.’ > **’o-loot-áake** ‘He isn’t being washed.’

A second strategy uses a pre-posed independent particle. This can be **táa** (singular)/ **tó** (plural) (Arnott suggests **táa** is from **tó** ‘if’ + **’a**) (1970:251, nt.2) used in Imperatives (a. examples) or **ná a**, used to negate the “Emphatic Past” (b. example):

- (30) a **wart-u** ‘Come back!’ > **táa wart(u)** ‘Don’t come back (singular)!’
wolw-atay ‘Keep on talking!’ > **táa wolw-atay** ‘Don’t keep on talking!’

- b 'o-loot-(u) 'He washed/has washed.' > naa 'o-loot-(u) 'He has not washed.'

11.10 Focus

Emphasis or 'focus' in African languages is commonly accomplished using one or more of the following strategies: (1) changes in the form of the main verb or use of auxiliary verb forms; (2) use of special words ('particles'); (3) use of cleft-type constructions; and (4) actual change in the basic word order... (Watters 2000:214,215).

Fula employs several of these strategies to emphasize sentence components. Some of these are exemplified here. Verb focus is achieved by the use of the "Emphatic Past" whose use serves to "emphasize a particular action or process, in opposition (expressed or implied) to some other action or process" (Arnott 1970:267). An example of these forms appears in (31) and in the examples in (32):

- (31) "Emphatic Past"

ACTIVE (-u/-Ø)	MIDDLE (-i/-Ø)	PASSIVE (-a)
'o-loot-(u) 'He washed/has washed'	'o-loot-i 'He washed (himself)'	'o-loot-a 'He was washed'

- (32) Verb focus using "Emphatic Past":

- a **ii, goonga, mi-yejjut-u** (verb **yejjit-** 'forget')
yes true 1s-forget-FOC
'Yes, it's true, I forgot.' (Arnott 1970:267)
- b **'o nawn-u-ndi,** **naa 'o-faɗɗ-u-ndi**
3s-wound-FOC-it NEG 3s-kill-FOC-it
'He wounded it, he didn't kill it.' (Arnott 1976:268)
(naa is used as a negator in combination with the emphatic past)
- c **mi-hokk-a-ɗum,** **naa mi-wu'y-a-ɗum**
1s-give-FOC-it NEG 1s-lend-FOC-it
'I was given it, not lent it.' (Arnott 1976:268)

For focus of nominal or adverbial sentence components, changes in word order are used. The focussed element is pre-posed and receives the main stress (") (all examples from Arnott 1976:30). Arnott indicates that there are, as well, "certain restrictions on the tense of the verbal" (1976:30).

- (33) Constituent focus:

- a focus on S: **Bëll**o waddi sheede hannde
Bello brought money today (SVO (Other))
'Bello brought money today.'

- b focus on O: **shēede Bello waddi hannde**
 money Bello brought today (OSV (Other))
 ‘Bello brought *money* today.’
- c focus on Other: **hännde Bello waddi sheede**
 today Bello brought money ((Other) SVO)
 ‘Bello brought money *today*.’

11.11 Overview of Fula verbal forms

SIMPLE FORMS		
ACTIVE wind- ‘write’	MIDDLE laat- ‘become’	PASSIVE yech- ‘tell’
PERFECTIVE ASPECT		
wind-u ‘Write!’	laat-a ‘Become!’	[No passive imperative]
taa wind-u ‘Don’t write!’	taa laat-a ‘Don’t become!’	taa yech-e ‘Don’t be told!’
mi-wind-ii ‘I wrote/have written’	mi-laata-ake ‘I became’	mi-yech-aama ‘I was told’
mi-wind-àayi ‘I didn’t write/have not written’	mi-laata-àaki ‘I did not become/have not become’	mi-yech-àaka ‘I wasn’t told/have not been told’
mi-wind-ii-no ‘I had written’	mi-laata-ake-no ‘I had become’	mi-yech-aa-no-ma ‘I had been told’
mi-wind-ai-no ‘I had not written’	mi-laata-aaki-no ‘I had not become’	mi-yech-aaka-no ‘I had not been told’
IMPERFECTIVE ASPECT		
mi-wìnd-a-t-a ‘I shall write’	mi-laata-o-t-o ‘I shall become’	mi-yech-e-t-e ‘I shall be told’
mi-wìnd-àtaa ‘I shall not write’	mi-laata-àako ‘I shall not become’	mi-yech-àake ‘I shall not be told’
mi-wìnd-ata-no ‘I should write’	mi-laata-oto-no ‘I should become’	mi-yech-ete-no ‘I should be told’

COMPLEX FORMS		
IMPERFECTIVE ASPECT		
'e- -a / ɗon-a	'e- -o / ɗon-o	'e- -e / ɗon-e
'e-mi-wind-a 'I write'	'e-mi-laak-o 'I become'	'e-mi-yech-e 'I am told'
mi-wind-ata 'I do not write'	mi-laak-ataak-o 'I do not become'	mi-yech-ataak-e 'I am not told'
mi-ɗon-wind-a I am writing'	mi-ɗon-laak-o 'I am becoming'	mi-ɗon-yech-e 'I am being told'
mi-wind-ata 'I am not writing'	mi-laak-ataak-o 'I am not becoming'	mi-yech-ataak-e 'I am not being told'
mi-ɗon-no-wind-a 'I was writing'	mi-ɗon-no-laak-o 'I was becoming'	mi-ɗon-no-yech-e 'I was being told'
mi-wind-ataa-no 'I was not writing'	mi-laak-ataak-o-no 'I was not becoming'	mi-yech-ataak-e-no 'I was not being told'
MIXED ASPECTS		
-ɗon/'e + -i	-ɗon/'e + -ii	-ɗon/'e + -aa
'o-ɗon-tekk-i 'He is fat.'	'o-ɗon-njood-ii 'He is seated.'	'o-ɗon-habb-aa 'He is bound.'
'e-mo-wodɗ-i 'He is far away.'	'e-mo-njood-ii 'He is seated.'	'e-mo-shudɗ-aa 'He is hidden.'

12 Godié

(Niger-Congo, Atlantic-Congo, Volta-Congo, Kru)

John Hewson/Christa Beaudoin-Lietz

12.1 General

This chapter reports on the verbal constructions of Godié, and since the source materials, mostly Marchese 1986a, give information about other Kru languages much cognate information has also been added. Though the various languages differ among themselves, even within one complex (Hasselbring and Johnson 2002), there are elements in the verbal structure that they all share¹.

The Kru language family is a group of languages spoken mainly in southwestern Ivory Coast and in Liberia. The total numbers of speakers of Kru languages is relatively small. Marchese (1986a) gives an estimate of 1.8 million, Encyclopaedia Britannica (2006) gives 3 million. The speakers of Godié, which belongs to the Eastern Kru languages, are reported by the Ethnologue as numbering some 27,000 in Ivory Coast.

A nine vowel system is common, and most have nasal vowels, including Godié, which has nine oral vowels plus four central vowels, as in (1).

(1)	Basic vowel system	Additional central vowels
	i u	i ɨ u
	ɪ ʊ	ɪ ɥ ʊ
	e o	e ə o
	ɛ ɔ	ɛ ʌ ɔ
	a	a

These are tone languages; Godié has three tones, Low, Mid, and High, and we have used an acute accent to mark H, no accent on M, and grave accent on L, as in the following: **sú** ‘push’, **su** ‘tree’, **sù** ‘be hot’ (Marchese 1986:16).

12.2 Word order

In Kru languages the word order depends on the type of sentence. The basic word order is S V O Other. When an auxiliary is present, the word order is necessarily as in (2), where VN represents a nominalized verb. In the second structure, Other can include ADV after AUX. Some constituents (e.g. temporal ADVs) can also be left dislocated for focus.

(2) S (particle) V O Other and S AUX O V Other (= S LOC O VN).

¹ The chapter was prepared originally by one of our collaborators, Christa Beaudoin-Lietz, as a chapter on the whole Kru family, which would then have been different from all the other chapters, except Narrow Bantu. Some of the cognate information, however, is especially relevant to Godié.

As Marchese points out, Kru languages exhibit a mixed system.² In SVO structures, O is meant as a general statement. To illustrate this from Neyo, several arguments can co-occur as in the following example with a ditransitive verb (Marchese 1986a:21):

- (3) **kɔkɔ la gla té**
 Kɔkɔ bring Gla yams
 ‘Kɔkɔ is bringing yams to Gla.’

Other items can follow in the basic sentence structure, for example adverbs in one of their possible positions³, and question particles (18) occur at the end of the sentence, as in (4-5) from Wobé.

- (4) **sa ɔ di-ɛ ko de dɔɔ**
 today he eat-DEC⁴ rice LOC market
 ‘Today he ate rice at the market.’ or ‘It is today he ate rice at the market.’

- (5) **ɔ di-ɛ ko de dɔɔ sa**
 he eat-DEC rice LOC market today
 ‘He ate rice at the market today.’ (Marchese 1986a:219)

Marchese notes that “Kru languages are exclusively suffixing.” (ibid.16). Concerning the structure of the NP, categories such as number and definiteness may be marked by suffixes. Several Kru languages have remnants of a noun class system expressed by suffixation. Most modifiers follow N within the NP⁵. Postpositions occur in Godié as the following example (ibid.18) illustrates:

- (6) **tlo wlú**
 hill on
 ‘on the hill’

The following examples illustrate the differences in word order with respect to verbs: the adverbial **zika** follows the inflected verb, be it main (7) or auxiliary (8). What is marked as a Recent Past also appears to be an adverbial element, since it follows the direct object (see §4.1).

² In contrast to those Africanists who posited an SOV word-order for proto-Kru, Marchese agrees with the now *communis opinio* that S AUX O V has developed out of S V₁ [OV₂ nom], where [OV₂ nom] serves as a complex complement of V₁. This point of view, proposed by Heine (1975) is simply another version of S V O because of the nominalization of the second verb, has also been argued by others (e.g. Ameka & Dakubu 2008:215-290).

³ According to Marchese (1986a), across Kru languages, temporal adverbs may occur in initial position (focused) or in sentence-final position. There is variance in terms of whether adverbs can occur within the verb brace (see example (7-8) from Godié).

⁴ DEC= Declarative

⁵ This is a general statement, examples reveal some variation as in (4). In some languages demonstratives precede the N.

(13) **Godié Performative**

- a **o kú`**
 3s die.PFM
 ‘He died.’ (Marchese 1986a:29)
- b **o ɬ́ tɛ**
 he eat.PFM snake
 ‘He ate a snake.’ (Ibid:39)

- (14) **o bà suká dɪ ká**
 she come.back.PFM rice cut NOM
 ‘She came back from cutting rice.’ (ibid:80)

(15) Krahn (bare verb stem)

- õ jũbõ dɛ**
 they know.PFM something
 ‘They know something.’ (ibid:31)

(16) **Godié Imperfective:**

- a **o kũ**
 he die:IPFV
 ‘He is dying.’ (ibid:29)
- b **o ɬ́ tɛ**
 he eat:IPFV snake
 ‘He is eating snake/He eats snake.’

In Godié the Imperfective marker has disappeared (16a, b), leaving a mid tone. The Imperfective suffix, where it occurs, is expressed in the majority of languages by a front vowel, “which typically agrees in vowel height and vowel harmony with the verb stem” (Marchese: 1986a:40)⁷. The different tonal suffixes of Godié are shown in (17): low and mid tones are replaced where necessary, and high tones result in high-low (PFM) and high-mid (IPFV).

(17) Godié:

Stem	PFM	IPFV	gloss
yɪ	yɪ	yɪ	‘come’
bà	bà	ba	‘leave’
nú	nu	nũ	‘hear’

⁷ Marchese reconstructs *e on verbal forms for Proto-Kru though she speculates that it may have been *le.

budò	budò	budo	‘bathe’
ḃ́líl	ḃ́líl	ḃ́líl	‘kill’

(Adapted from Marchese 1986:45)

The Retrospective aspect is also found in many Kru languages, though, according to Marchese, not in the Grebo complex. In many, it is expressed by an auxiliary as in the Godié examples in (18-20).

(18) **ḃ́ yḅ pḃpḃ sḃk bóo bia-a**
 you RTR just-now rice bowl finish-Q
 ‘Have you just finished (eating) the bowl of rice?’ (Marchese 1984:251)

(19) **ḃ́ yḅ kú**
 3s RTR die
 ‘He is dead’ or he has died.’ (Marchese 1986a: 29)

(20) **ḃ́ yḅ-a zḅ púú**
 3s RTR-earlier already pass
 ‘He had already passed (in front of them).’ (Marchese 1986a:68)

Auxiliaries cannot be marked for PFM or IPFV aspect, and require a suffixed adverbial marker to represent the past. For the status of the adverb ‘recently’ as in (20) and (25), see §12.4.2 below.

Finally, the Progressive is a periphrastic form; there are different forms for Eastern and Western Kru but the structure is the same: S be-at (O) V-NOM, the nominalization in the examples in (21,22) being achieved by the locative noun ‘place’. The verbs expressing ‘be-at’ differ from Western Kru (generally **n** + front vowel) to Eastern Kru (**kḃ/wḃ**) as in the following examples from Godié.

(21) **ḃ́ kḃ kú dḅ**
 3s be-at die place=NOM
 ‘He is in the process of dying.’ (ibid:29)

(22) **ḃ́ kḃ nāà dḅ**
 3s be-at walk place=NOM
 ‘He is walking.’ (ibid:25)

The Progressive is not used for habitual actions, while the Imperfective involves durative or habitual actions (23). The Progressive is not frequent in narratives, but may be used as background to ‘frame the event’ (24). It is formed periphrastically as in the Godié examples below, while the Imperfective, as already noted, is marked by the suffix (or tone remnant of suffix) *e on verbs.

(23) **Progressive**

ɔ kɔ sɛkʌ ɓi dʌ
she be-at rice pound place
'She is pounding rice (right now).'

Imperfective

ɔ ɓi sɛkʌ
she pound.IPFV rice
'She is (always) pounding rice.'

(24)

ɔ ŋwɔnɔ ɔ kɔ budo dʌ lé ɔ pʌʌ jɔli-ɛ
his wife she be-at bathe place and he throw-PFM arrow-DEF
'While his wife was taking a bath, he shot the arrow.'

12.4.2 *Tense*

Tense-like distinctions also exist in Kru languages. According to Marchese, certain languages such as Wobé and Gbaeson Krahn have no tense contrasts. On the other hand, while many Kru languages exhibit two adverbial style tense markers, one indicating recent past (25) and another indicating remote past (26), in some of the Western languages more distinctions have been reported. "In several Kru languages, temporal adverbs developed into tense markers" (Marchese 1984:265). The process is described as time adverbs moving out of the positions bracketed by AUX and V to positions following V (exbraciation), while reduced forms remained, forming "tense" markers. In some languages this process of tense formation is ongoing. Examples (25-26) are from Godié.

(25) Recent past

ɔ mɛ-a sũkũ
he go:PFM-recent school
'He went to school.'

(26) Remote past

ɔ yi-ɛ wʌ li
he PRP-it remote eat
'He was going to eat it.'

As we have already seen in example (7), however, (ɔ **l-ɛ-a zika** 'He ate it yesterday'), the DO **ɛ** occurs BEFORE the "tense" marker **-a**, and the "tense" marker **wʌ** in (26) has been written as a separate word by Marchese, in spite of the fact that it is supposed to contrast with the **-a** of (25). The use of these "tense" markers is also optional, the difference being marked aspectually, as already seen in the minimal pairs in (13) and (16) above, where there are clear cut present and past representations without any signs of "tense" markers.

As noted above, in a later chapter on exbraciation (the breakdown of S AUX (O) V) Marchese (1986:263ff) lists four stages of the development of tense markers from time adverbs:

Absolute Past	ò	a	la	li
	3s	RTR	T	eat
				‘He ate.’
Future	ò	i	lè	li
	3s	PRP	T	eat
				‘He will eat.’
Subjunctive	ó	ka	lè	li
	3s	SBJ	T	eat
				‘He should eat.’

Here we see a Retrospective, an aspectual form, used in the function of Near Past, and **la** (from **kaalaa** ‘yesterday’) as the marker of a general Past. In similar fashion **lè** (from **kèèlè** ‘tomorrow’) used not only for Future, but also for the Subjunctive, which also represents imaginary Non-Past time: the only difference between the two is the typical H tone on the Subjunctive subject pronoun.

In Kru, representations of the future may be constructed in three different ways, by suffixation, by periphrasis, or by Aux, with considerable variation from one language to another. Modal meaning may also be involved. Some languages use more than one way of representing future time. In Godié, however, futures are expressed only by auxiliaries, the future AUX being developed from verbs expressing ‘come’ in (33), ‘have to’ (34).

(33) **ɔ yi mɛ**
 3s FUT.POT go
 ‘He can go.’ (Marchese 1986a:73)

(34) **ɔ ká sɔ pɪ**
 3s FUT.VOL down lie
 ‘He wants to lie down.’ (Marchese 1986a:73)

12.5 Other categories: Subjunctives

Sentence initial markers, which may coalesce with the subject pronoun, indicating Subjunctive and Conditional may also occur, for example

(35) Grebo: **b-a du nɛ**
 SBJ-1p pound it
 ‘Let us pound it.’ (Innes 1966 quoted from Marchese 1986a:25)

The Imperative is the base form of the verb as the following example illustrates:

(36) Grebo: **du nɛ**
 pound it
 ‘Pound it!’

In Godié the only difference between the Imperative and the Subjunctive is that the latter always has a subject pronoun, as in (38).

(37) **mu**
go.IMP
'Go!'

(38) **ɔ mu**
3s go. SBJ
'He should go.'

12.6 Negatives

There are at least two, in some languages three, different strategies to express negation in every Kru language. One of them is the use of a negative auxiliary. Performative verbs are always negated by negative auxiliaries, the use of which results in the typical word order of S NEG O V. Progressives and clauses expressing future time are also negated by auxiliaries. In contrast, Imperfective clauses are never negated by negative auxiliaries (Marchese 1986a:168).

Imperfectives are negated by second-position particles: the word order in these types of aspectual clauses is S NEG V O. The particles differ from auxiliaries in that they never occur with object clitics, tense markers, or adverbials. These negative formatives may be phonologically reduced and become part of the subject noun pronoun as in (45). Clauses that include negative imperatives or hortatives (subjunctives or non-second person imperatives) differ either in strategy or morphological shape from Performatives.

In Kru languages the negative auxiliaries are **se** (e.g. (39) which occurs in the majority of languages in the Western group), **ta** (e.g. (40,41); occurs in a limited form in the south eastern portion of the Eastern group), and **né** (e.g. (42) which occurs in Eastern Kru, with cognates in Western); **ti** has also been found. The particle **ni** or (**n** + high front vowel) is attested in several Western languages, and traces of it are found elsewhere. Where this particle is found, it negates Habituals and generics and in many cases Imperfectives, Hortatives, and Imperatives.

(39) Bassa (Hobley):

ɔ nyu-ε	žɔ	ɔ se-ε	zʒɔ
3s do.PFM-it	long- time-ago	3s NEG.PFM-it	long.time.ago
'He did it a long time ago.'		'He didn't do it a long time ago.'	

(40) Koyo

o	ta	yoo-o	yi
3s	NEG.PFM	boy-DEF	know
'He doesn't know the boy.' (Marchese 1986a:173)			

(41) Lozoua Dida

ɔ́ tá-ā budo
3s NEG-RCP bathe
'He didn't bathe.' (Marchese 1986a:172)

(42) Neyo

o ne gòlo ne sa yi
they NEG canoe do way know
'They didn't know how to use a canoe.' (Marchese 1986a:173)

The negative auxiliary can be phonologically reduced and can occur as the tonal suffix (high tone) on the preceding noun or pronoun, as in (43) from Godié, where the high tone of the subject pronoun **ʌ** 'I' both reflect **né**.

(43) ʌ́ a Dàkpá dʌ yi
1s.NEG recent Dakpa place know
'I didn't know where Dakpa lived.' (Marchese 1986a:176)

In Godié, reflexes of **wé** and **ta** found with Performatives and reflexes of **ní** are found in the Imperfectives, Habituals, and Imperatives (Marchese 1986a:178-203). The following, according to Marchese, illustrates the negative particle, showing (44) the negation of the Imperfective, and (45) of the Imperative in Dewoin.

(44) ɔ́ na tawa ɔ́ ní ná tawa
3s:IPFV drink tobacco 3s NEG drink tobacco
'He smokes,' 'He doesn't smoke.' (1986a:168)

(45) nì nu ɔ́
NEG do it
'Don't do it!.' (1986a:169)

12.7 Auxiliaries

There are several auxiliaries in Godié which serve a variety of purposes. Auxiliaries form analytic aspects, as opposed to the synthetic aspects formed by suffixes. The two Prospective forms **mu** and **kʌ** (before the event), are given in (46) along with **yi** which marks the Prospective elsewhere in Kru, and the full verbs from which they are obviously derived.

(46) Full verb AUX
mɛ 'go' **mu**-PRP
kʌ 'have (to)' **kʌ**-PRP
yi 'come' **yi**-PRP

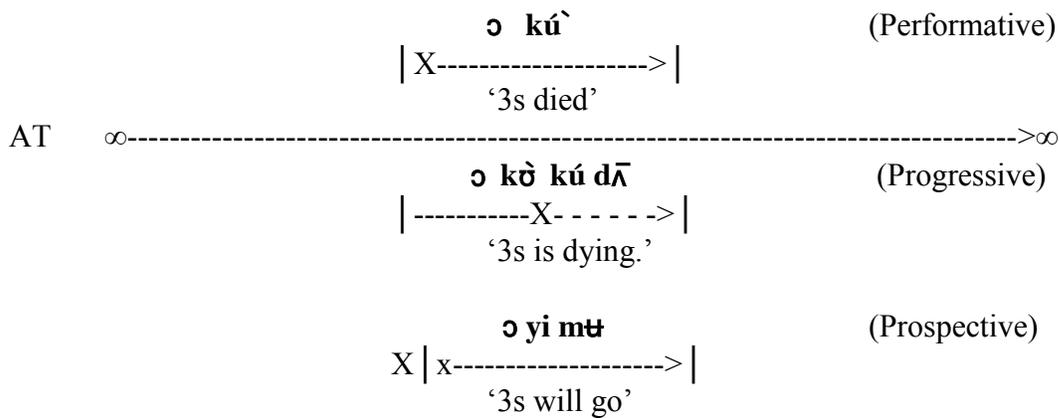
The Progressive (during the event) in Godié is marked by **k**, which probably has spatial rather than verbal reference. It is given in (47), along with the Retrospective auxiliary **yΛ** and the full verb from which the latter may be derived.

- (47) (**ne** ‘be at’) **kð**-PRG
 (**lλ** ‘bring’?) **yΛ** -RTR

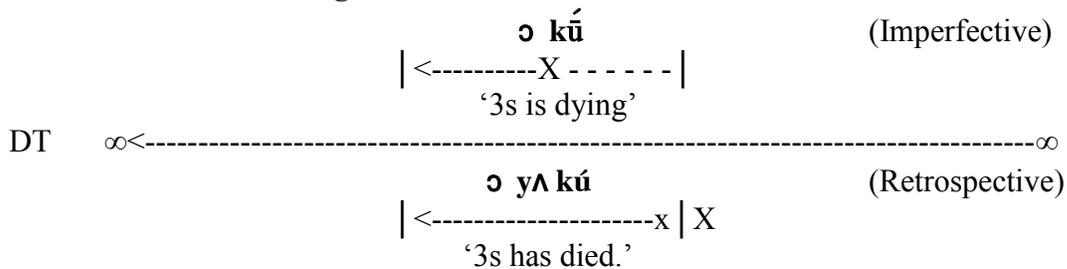
There are also the negative auxiliaries, **se**, **né**, and **tá**. **Se** is found only in Western Kru, while **né** and **tá** are mostly found in Eastern Kru.

12.8 Diagrammatic Representations

(i) Forms in Ascending Time



(ii) Forms in Descending Time



13

Ijo

(Kolokuma dialect, Ijoid)

Derek Nurse/Christa Beaudoin-Lietz

13.1 General

Between one and two million people speak varieties of Ijoid in southeast Nigeria's Niger Delta. There are probably fewer than 30,000 Kolokuma speakers.

Ijo's nine vowels divide into two +/- ATR sets, with /a/ belonging to both sets: +ATR /i, e, a, o, u/, -ATR /ɪ, ɛ, a, ɔ, ʊ/. Vowel harmony works from left to right across morphemes, and in a few cases across words, that is, vowels in morphemes usually all belong to one set or the other. Williamson treats long vowels as sequences, not contrastive units. Sequences of two vowels are common, sequences of three are less common. Vowel nasalization is predictable, occurring before juncture, continuants, and nasal consonants. Most syllables are CV or V.

There are two tonemes, high (acute accent) and low (unmarked). Tones are marked in relation to tone phrases: tone patterns extend over tone phrases, tone phrases are built from tone groups, which are built from morphemes ("units"), which in turn consist of consonant and vowels. Unmarked syllables following a marked one bear the same tone as the marked one, until the next marked tone is reached¹. Within a tone phrase initial unmarked syllables are low. Morphemes also fall into different tone classes, which behave variably, depending on the context. Various processes often result in surface and underlying tones being different.

Our main sources are Williamson (1965 and 1991) and Jenewari (1989). Williamson 1965 is a grammar carefully written in an early generative framework, while her 1991 piece is a short chapter specifically on tense and aspect.

13.2 Word order

Canonical order is S Other O V, as in examples (1) and (2). With auxiliaries, the order changes to S Other O V AUX, as exemplified in (3).

- (1) a **wóni mú-ni ɔwɔ́ɔ-ɔ ɔ-la-mí**
 1p go-linker road-LOC 3sm-reach-FAC
 'We went and met him on the road.'
- b **ɔmɪní kɛni óbori tɔbɔɔ ɛri-mi**
 3p one goat child see-FAC
 'They saw a young goat.'

This order may be changed by fronting, for focusing:

¹ We differ from W (1965) in the marking of tones. She has high, low, and unmarked. We mark only high and low.

- (2) **kɛni óbori tɔbɔɔ ɔ mɔ ɛri-mi**
 one goat child 3p replative see-FAC
 ‘(It was) a young goat that they saw.’

Williamson distinguishes carefully items which occur at “Suffix₁” (see §13.3) from auxiliaries. Auxiliaries are very small set, themselves regularly followed by a TA marker. Included in these auxiliaries are at least two ‘be’ verbs, the most common of which we have identified in glosses as be₁ and be₂. These are discussed more fully in §13.7. Some examples and their meanings include: **tími-mi** (be₂ + FAC) ‘was verbing, used to verb’ (FAC IPFV), **wé ri-mi** (stative₂+FAC) ‘had verbed’ (“Far Past”), **tími-ɣɪmi** (be₂ + Future) ‘will be verbing’ (Future IPFV), **tími-dɔɔ** (be₂ + Perfect) ‘have been verbing’ (PFT IPFV).

- (3) **wóni déin-ɔ bɔ́nɔ tími²-dɔɔ-aba**
 1p night-at sleep be₂-PFT-when
 ‘When we are asleep at night...’

There are also serial verbs, in which aspect marking for aspect, tense, and negation, is restricted, often occurring only on the last verb.

- (4) a **erí amá duo yɔɔ bo-mí**
 3sm town go.through paddle come-FAC
 ‘He came paddling through town.’
- b **erí okí mu tɔru beĩ-mi**
 3sm swim go river cross-FAC
 ‘He went and swam across the river.’
- c **erí kóro-ni okí-mi**
 3sm begin-linker swim-FAC
 ‘He began to swim.’

13.3 Verb structure

A provisional template for the verb is as follows, where the hyphen seems to represent a morpheme boundary between affixed constituents:

OP - root - EXT - Suffix₁ – Suffix₂

Williamson uses the terms “enclitic” and “final” for our Suffix₁ and Suffix₂, respectively. We renamed them because one would expect enclitics to follow finals, rather than vice versa. “Enclitics” and “finals” are defined tonally, finals only occurring finally in a tone group, medials occurring medially or finally in a tone group. Little is said of meaning or function in this definition. She has a long list of enclitics and finals, and many

² In this example, **tími** (be₂) is functioning as a Progressive.

combinations are possible. However, since only a few combinations are exemplified, we cannot be quite sure of the membership of the two classes nor of how many or which may co-occur. An example of the basic template, less extension, is:

- (5) **..ɔ-tɛ-mí-eé**
 3p(OP)-beg-FAC-EMPH
 ‘..begged them!’

OP: Pronouns come in different types – independent, possessive, subject and object, both of which differ according to whether a consonant or vowel follows. We list here only the object pronouns: where there are two shapes, the first occurs before consonants, the second before vowels. 1s **ɪ, ine**; 2s **ɪ, iné**; 3sm **ɔ, wo**; 3sf **a, ará**; 1p **wó**; 2p **ɔ, ɔrɔ́**; 3p **ɔ, ɔrɔ**.

EXT: There are only two clear EXTs, a causative **-mɔ-** and a transitiviser **-í**. We ignore a second homophonous **-mɔ-**, added to a transitive verb, because “its meaning is not clear”, and a passive because it is expressed by change of word order and of tone pattern. Williamson and Blench (2000:23) characterize these EXTs as “few, mostly new formations”.

Suffix₁: These express a range of categories, including number, gender, definiteness, “all”, agent, negation (**-a-**), tense, and aspect. Williamson lists twenty-three in total. Those expressing tense and aspect are: **-mɪ** (FAC), **-yémi** (Imperfective), **-dɔɔ** (Perfect), which corresponds to the independent verb ‘know’: **nimí/ wónimí** (stative₁) **wé rɪ-** (stative₂) (discussed below), **-ɳí (mɪ)** (Future), **-ɳí-dɔɔ** (Future + Perfect) ‘be about to’.

Suffix₂: Williamson lists twenty-one morphemes at Suffix₂. We deal summarily with these because they are not central to our concerns. Not surprisingly, as befits morphemes occurring at the right hand edge of the verb, these correspond largely to independent conjunctions, emphatics, and particles in other languages, translating notions such as ‘and, with, when, if, as, when, after, as soon as, while, because, interrogation, relative, various kinds of emphasis’.

13.4 (Tense), aspect

§13.4.1 lists the simplexes that make up the tense-aspect system. Where our terms and Williamson’s differ, we use ours, followed by hers in brackets. §13.4.2 shows combinations of these basic morphemes. §13.4.3 discusses the interpretation of the system and §13.4.4, the morphology.

13.4.1 Basic forms

The **Factative** (“Simple or Neutral Past”), suffixal **-mɪ**, refers to a past event for active verbs, or to the current state resulting from a past event for “process” verbs (Williamson 1991:148) (but compare (8) below):

- (6) a **i bo-mí**
 1s come-FAC
 ‘I came.’
- b **kírŋ-mí**
 become.right-FAC
 ‘It’s right.’ (lit. ‘it became right’)
- c **akó-mí**
 become.bitter-FAC
 ‘It is bitter.’
- d **(bó ní) akó-mí**
 (come linker) become.bitter-FAC
 ‘It became bitter.’

Imperfective (“Continuous”) aspect is rendered in two ways. The first method uses the be_2 auxiliary **tími**, (always in combination with another morpheme), and refers to non-present events (see §13.4.2, following); the other, **-yémi**, refers only to present situations and does not occur with other tense-aspect markers. It is probably linked to be_1 -verb **émi** discussed in §13.7. Examples of **yémi**:

- (7) a **í bó-yemi kírŋ-yemi**
 2s come-IPFV right-IPFV
 ‘Are you coming?’ ‘It’s getting right.’
- b **a tóo-yemí ifie-bi erí pá-doo**
 3sf cook-IPFV time-DEF 3sm exit-PFT
 ‘While she was cooking, he went out.’
 (lit. ‘While she cooking he has gone out’)

Perfect (“Immediate Past”) has perfect function with active verbs and refers to the resultant state with stative verbs:

- (8) **i bo-doo kírŋ-doo i na-doo**
 1s come-PFT be.right-PFT 1s hear-PFT
 ‘I have come.’ ‘It has become right.’/ ‘I understand.’
 ‘It is right now.’

The **Future**, **-ŋí(mi)**, refers to future situations:

- (9) **i mu-ŋími kírŋ-ŋími**
 1s go-FUT be.right-FUT
 ‘I’ll go.’ ‘It’ll be right.’

The **Stative** has two shapes: the main being **-nimí³**, which Williamson refers to as the “Neutral present (state)”, but we gloss as *stative₁*. The past form is **-wérí** ‘be, leave, let stay, keep’, which we gloss as *stative₂*. It is dealt with in §4.2, as it always combines with a suffix where its meaning is “Far Past”.

- (10) **ebi-nimi**
 be.good- *stative₁*
 ‘It is good.’

13.4.2 Combined forms

Auxiliary element **timi** ‘be₂’ combines with other aspects and tense, with the Factative (11a), the Future (11b), the Perfect (11c), and with both Future and Past (11d). For these reasons, we interpret this auxiliary as Factative ‘be’. The Imperfective sense arises from the syntactic structure of main verb + auxiliary element:

- (11) a **erí okí timi-mi** **kírú timi-mi**
 3sm swim be₂-FAC be.right be₂-FAC
 ‘He was swimming.’ ‘It used to be right.’
- b **erí tíé tími-ηImI**
 3sm stand be₂-FUT
 ‘He’ll be standing.’
- c **wóni déin-ó bónσ timi-dσσ-aba**
 1p night-at sleep be₂-PFT-when
 ‘When we are asleep at night...’
- d **akó-a timi-aba arí bóu-ηi timi-mi**
 be.bitter-NEG be₂-when 1s drink-FUT be₂-FAC
 ‘If it had not been bitter I would have drunk it.’

Future combines with Perfect (“Immediate Future”):

- (12) **arí mú-ηi-dσσ** **kírú-ηi-dσσ**
 1s go-FUT-PFT be.right-FUT-PFT
 ‘I’m just about to go.’ ‘It’s on the point of being right.’

Quite widely in Niger-Congo, perfect or near past can be interpreted as ‘decision to verb made, action about to happen’, as in “I’m gone, I’m out of here”. That interpretation combines here with the Future to give the meaning indicated.

The past allomorph of the Stative, **-wérí** (*stative₂*), combines with Factative marker **-mi** to give what Williamson calls the “Remote Past/Past State”, our “Far Past”. Her only examples are:

³ There is a second shape **-wónimí**, discussed below in §13.4.4.

- (13) a **erí bó-wérí-mí**
 3sm come-Far Past
 ‘He had come.’
- b **kírí-wérí-mí**
 be.right-Far Past
 ‘It used to be right.’
- c **arí ebi wérí-mí**
 1s become.good Far Past
 ‘I used to be good.’

Finally, **Habitual** action can be expressed by reduplicating the root. It is said that several combinations are possible but only one is exemplified, involving the IPFV:

- (14) **déin biri la-dɔɔ-aba kímí tɛmɛ doruo dorou-yemi**
 night mid reach-PFT-when men ghosts shout shout-IPFV
 ‘Whenever it comes to midnight, ghosts of men cry aloud.’

13.4.3 Discussion

We interpret most Niger-Congo languages in terms of aspect because they make no tense distinctions. The two exceptions seen so far are the Grassfields language Aghem and the Bantu languages, which have both aspect and tense. How to interpret Ijo, especially in view of Williamson seeing it as having past(s), present, and future?

All languages, whether they have tense or not, will have some basic and familiar aspects. So Ijo has Imperfective (“Continuous”) and Perfect (“Immediate Past”), described as having an effect on the present. In the same vein, the iconic use of reduplication to represent an iterative and habitual situation is common and justifies the term Habitual.

We have no quibble with Williamson’s Future. In some languages some functions or translations of forms with future reference suggest a clear modal or even aspectual component. Nothing about Williamson’s examples suggests anything but a Future (tense). However, as we have seen often enough already, a future does not necessarily imply other tenses, since there are languages which we interpret in terms of aspect and which show no signs of general tense marking but nevertheless have a lone future.

This brings us to the interpretation of the -mi form, which Williamson calls variously the “Simple” or “Neutral” Past, and which occurs often in her data. Is it a (past) tense or a (factative) aspect? With active verbs, which are numerous, it has past reference, while with stative verbs, less numerous, it refers to the present state resulting from a past event. This situation occurs often across West African Niger-Congo and leads us to interpret it, as elsewhere, as a Factative, even though it lacks the other classic characteristic of Factatives, zero marking.

What then of the form that she calls "Remote Past" or "Past State"? In languages with a binary past tense distinction, one represents near or general past time, while the other represents more distant time. But we have reinterpreted Williamson's Simple/Neutral Past tense as a Factative aspect, removing the possibility of such a binary past distinction. We are not sure how to deal with this form, partly because she has very few examples (see example (13)), partly because she shows no examples of its compatibility with time adverbials. Thus we leave it with her label, Far Past, but are not completely sure of its function.

We are also unsure of the status of what is called the "Neutral Present (State)", above. The examples are few, the total list being:

- (15) a **ebi-nimi**
 be.good- stative₁
 ‘It is good.’
- b **indi kí subo-nimí**
 fish FOC carry- stative₁
 ‘It is fish I am carrying/carry (have on head)’
- c **erí bó-nimi**
 3sm come- stative₁
 ‘He is here’ (lit: ‘He is come’)
- d **ɔ paá-nimí**
 3sm exit- stative₁
 ‘He is out.’
- e **ɔ paá-wónimí**
 3sm exit-wonimi
 ‘He must have gone out.’
- f **akó-nimi**
 be.bitter- stative₁
 ‘It is bitter.’
- g **arí nimi-wónimí...**
 1s know-wonimi
 ‘I know (that...)⁴
- h **ɪ tɔn-wónimí....**
 1s think-wonimi
 ‘I think (that...)

⁴The first **nimi** in this example is the independent verb ‘know’. Suffixal **-nimi** is quite likely a grammaticalized version of this verb. The same process may have operated with suffix **-yemi**. Williamson suggests that this is the case, the **y-** a remnant of an earlier progressive marker (1991:158).

- i **I-daṣ** **amaran** **mɛ** **ebi** **na-wónimí-ni....**
 my-father Amaran do good hear-wonimi-linker
 ‘Having heard the good deeds of my father Amaran....’

Our uncertainty here centres on two issues: i) is this **nimí** linked to the “Remote Past (State)” exemplified in (13), and ii) how are **-nimí** and **-wónimí** to be interpreted? Williamson wavers in her interpretation of how **nimí** and **wónimí** differ – do they represent present versus past, or does **nimí** represent “present state with intransitive verbs” and **wónimí** “present state with transitives”? The only examples which support a past interpretation of **wónimí** are (15e) and the incomplete sentence (15i). (15e) contrasts with (15d) and might be termed an inferential (epistemic) on the basis of the translation, which is not a good basis for judgements of tense. About (15i) she says “the context is clearly past” (1965:113). However, the translation could just as well be ‘Hearing the good deeds..’ and the past context given in the uncited main clause following, not in the part cited in (15h). No other examples associate **wónimí** with past reference, so we find the past interpretation for **wónimí** doubtful. We also find the association with transitive (**wónimí**)/intransitive (**nimí**) doubtful: in (15d, 15e), both occur with the same (intransitive) verb, and the verb in (15b) is transitive.

If we consider examples (15d) and (15e) as a minimal pair, the difference between the two is modal, with **wónimí** adding an inferential sense that **nimí** alone does not have. Generally, **wónimí** seems to occur in subordinate contexts, whereas **nimí** occurs in the main clause.

In sum, our conclusion is that Ijo is basically another aspect language. Similarly, but not identically to Williamson's treatment, we view Ijo as having: Factative, Imperfective, Perfect, and Habitual. There is apparently a Future, and we are not sure of the status of the “Far Past” and the “Present State.”

13.4.4 *Comments on morphology*

Many of the other languages examined in this book have what we refer to as an unmarked or zero form. It is always useful in interpretation to have such a form, because it gives a clue to the analysis. In synthetic languages, it means a form with zero marking for tense/aspect before the stem, so that only the suffixes are meaningful. In analytic languages it would mean a form without a suffix carrying tense or aspect, or a form which has a suffix, which for one reason or other can be interpreted as simpler or more basic than the others. As Ijo is, outside its core stem with affixes, an analytic language, we would have expected it to have an unmarked suffix, but it does not have such a form. All the suffixes, or auxiliaries, have considerable substance and none can be interpreted as an unmarked form. Most of the suffixes and auxiliaries can be related to independent verbs and can be assumed to be grammaticalised shapes of these independent verbs.

Short grammaticalised affixes or clitics with shapes such as C, V, or VC, or CV can safely be assumed to be older, as they have had enough time to reduce to the canonical CV shape. whereas longer, unreduced, shapes are more recent. The suffixes in Ijo are longer and unreduced, and several can still be linked to independent verbs, which suggests that the current morphology developed fairly recently in Ijo.

Whereas affirmative main verbs in main clauses always have a tense or aspect marker at Suffix₁ or as Auxiliary after the main verb, other verb forms sometimes lack such marking. In negatives (see examples in (21) and (20a), below), with one exception, the negative marker is the only morpheme to occur on the main verb, either replacing tense-aspect marking or displacing it on to the Auxiliary. Similarly in relativised verbs, the same tendency is visible (see (19)). Similarly in verbs with morphemes at Suffix₂ translating as ‘when, if, after, while, because, etc’, tense and aspect marking is sometimes absent, as in:

- (16) a **...u-kulé-mɔ**
 3sm-greet-when
 ‘When...greeted him..’
- b **ɔmIní wó-kamɔɔ-mɪ wó wari la-mɔ**
 3p 1p-entertain-FAC 1p house reach-when⁵
 ‘They entertained us as soon as we reached the house.’

13.5 Other categories

13.5.1 Mood

Williamson recognizes Optative and Hortative, and therefore, by default, Indicative (unmarked). The Optative uses an independent subject pronoun and the emphasiser **-eé** (17). The Hortative (1 plural) consists of the Optative preceded by **bó-da** ‘come and’ (18).

- (17) a **erí mú-eé**
 3sm go-EMPH
 ‘Let him go/ he should go.’
- b **wó fín-eé**
 1p fly-EMPH
 ‘We should fly.’
- (18) **bó-da wó fín-eé**
 come-and we fly-EMPH
 ‘Let’s fly!’

13.5.2 Focus

Williamson distinguishes focus and emphasis. Focus, of a sentence constituent such as object or adverbial, involves fronting and is exemplified in (2), above. Fronting can apparently be supplemented by the use of a particle **ki**, as in (19a, 19b). In emphasis, either the verb or a function (vocative, interrogative) is highlighted. There are different

⁵ This cannot be a case of tense being only represented once in a string because in such cases it is the final verb that keeps the marking.

kinds of emphasis (“polite emphasizer of verb, stronger emphasizer of verb, strong and friendly emphasizer of verb”, etc). All involve morphemes at Suffix₂, underlined below.

- (19) a **te** **yé** **ki** **tɔɔ-ŋɪ** **aáa**
 what thing FOC cook-FUT Q
 ‘What are you going to cook?’⁶
- b **fóí** **ɔɔ** **ki** **tɔɔ-nɪ**
 soup FOC cook-FUT
 ‘I’m going to cook soup.’
- c **erí** **mú-ŋɪmɪ-eé**
 3sm go-FUT-EMPH
 ‘Let him go/ He will go!’
- d **ɔ** **koró-naá** **yɔɔ-mí**
 3p begin-EMPH paddle-FAC
 ‘They began to paddle.’

13.5.3 Imperative

The imperative singular is an unmarked form: **tun** ‘sing’, **dúma tun** ‘sing a song’, **a-píɪɪ** ‘give her..’, **ɔ-píɪɪ** ‘give him..’. The imperative plural has a subject pronoun and suffixal **-eé**, one of the verb emphasizers, that is, it is the same as the “Optative”.

13.5.4 Relativisation

Two different strategies are involved in relativisation. One, which applies to relativised subjects and objects, changes word order and may add **-nɪ** to the head noun or pronoun. This suffix is identical formally and tonally to the linker **-nɪ** seen in (1), above:

- (20) **béi** **tɔɔɔ-nɪ** **gbá** **ye** **poi-a** **tɔɔɔ-bɪ**
 this child-REL say thing listen-NEG child-DEF
 ‘This is the child who did not listen to what was said.’

A second strategy involves a change of word order, and probably of tone, but since the details are not described, we simply exemplify it:

- (21) a **na-a** **kíɪmɪ**
 hear-NEG man
 ‘...man who did not hear’ (V S, normal order would be S V)

⁶ Morphemes such as the Future and the Present look as if they might consist of two morphemes, the second being **-mi** ‘Factative’. Williamson (1991:157, 159) says that any second morpheme is more likely to have been **emi** ‘IPFV’. **-mi** and **emi** are “not related”.

- b **ƆƆ-ɗɛɪ** **bíɗɛ**
wash-PFT cloth
‘...cloth that has been washed’ (**ɗɛɪ** is an allomorph of **ɗɔɔ**)
- c **buru-bí** **sou** **ƙɪmɪ-bɪ**
yam-DEF dig man-DEF
‘The man who dug up the yam.’

13.6 Negation

A binary negative contrast exists between the regular negative, occurring in most syntactic contexts, and a secondary negative, in the Optative (and other?) contexts. A pre-verbal morpheme **naá**, translating as ‘yet’ co-occurs in some forms with the regular negative.

Two features characterise the regular negative, which occurs in the suffix₁ (“enclitic”) slot: first, the number of negative contrasts is smaller than that of affirmatives, so some tense/aspect contrasts are neutralized, and second, the negative **-a**⁷ replaces tense/aspect markers at suffix₁ rather than co-occurring with them. Both these features can be seen in these examples:

(22)		AFFIRMATIVE	NEGATIVE
	FAC	a bó-mi 3sf come-FAC ‘She came.’	a bó-a 3sf come-NEG ‘She didn’t come.’
	IPFV	a bó-yemi 3sf come-IPFV ‘She is coming.’	a bó-a 3sf come-NEG (same as preceding) ‘She isn’t coming.’
	FUT	a bó-ɣímí 3sf come-FUT ‘She will come.’	a bó-a fa-ɣímí 3sf come-NEG be ⁸ -FUT ‘She won’t come.’
	PFT	a bó-ɗɔɔ 3sf come-PFT ‘She has come.’	a náa bó-a 3sf yet come-NEG ‘She hasn’t come yet.’
	FUT +PFT	a bó-ɣɪ-ɗɔɔ 3sf come-FUT-PFT ‘She’s just about to come.’	a bó-a fa-ɣímí 3sf come-NEG be-FUT ‘She’s not just about to come.’

⁷ **-a** is **-ya** in other dialects.

⁸ **Fa** is a suppletive negative form of **timi/emi** ‘be’.

Present	a bó-nimí	a náa bó-a-nimí
Stative	3sf come-stative ₁ 'She is here.'	3sf yet come-NEG- stative ₁ 'She isn't here yet.'
FAC IPFV	a bó timi-mi	a bó-a timi-mi
	3sf come be ₂ -FAC 'She was coming.'	3sf come-NEG be ₂ -FAC 'She wasn't coming.'

To this Williamson (1965:75) adds: "The remaining aspect markers appear not to occur regularly in the negative, but to be replaced by one of the commoner aspect markers noted above." The secondary negative can be seen in (23), characterised as "Optative" by Williamson.

- (23) **baŋɪ** 'Run! **baŋɪ-kɔmó**
run-NEG
'Don't run!'

13.7 'Be'-verbs, auxiliaries

It is not clear that auxiliaries beside those involved in aspect (see §13.2, above) occur. As (19b) suggests, what would typically be auxiliary constructions in other languages appear as serial verbs in Ijo, with verbal categories marked on the last member.

There are at least two verbs translated by English 'be'. One is **émí**, 'locative-be' ('be, stay, live, exist') which we gloss as 'be₁' and interpret as lexically imperfective. It occurs as an independent verb, and with exclusively present reference (24a). A second is another locative-be, **tímí**, which we gloss as 'be₂' and interpret as lexically factitive. It occurs with non-present reference (24b,c), and may occur as an independent verb (example (24d)).

There are two statives, which occur at suffix₁, **-nimi** (stative₁), and **-wáí** (stative₂), translated variously by 'be, leave, let stay, keep'. In the tense-aspect system, **nimi** (stative₁) appears with present reference, as in examples in (15), whereas **wéí** (stative₂) occurs with past reference and marking (examples in (13)):

- (24) a **áraló Léḡosi kɔɔ emí**
3sf Lagos LOC be₁
'She is (living) in Lagos.'
- b **áraló Léḡosi kɔɔ tímí-mí**
3sf Lagos LOC be₂-FAC
'She was (living) in Lagos.'
- c **erí tísaowei kɔɔ tímí-mí**
3sm teacher LOC be₂-FAC
'He used to be a teacher.'

- d **o warɪ-bí-o timi ifie-bi**
 3sm house-the-LOC be₂ time-the....
 ‘When he was in the house...’ (The tense comes from the context).
- e **buru-bí wɛɪɪ**
 yam-DEF leave
 ‘Leave/keep the yam!’
- f **indi warɪ émí**
 fish house be
 ‘There is fish in the house.’
- g **indi warɪ ghó t́mí-mí**
 fish house LOC be-FAC
 ‘There was fish in the house.’

14

Jukun

(Jukunoid, Central Nigeria)

Derek Nurse

14.1 General

Some 140,000 people speak varieties of Jukun in northcentral Nigeria, along and north of the Benue River. Jukun is a rather poorly documented group, so demographic estimates may be shaky and linguistic descriptions are in general sketchy. Our analysis relies entirely on Storch's (1999, 400 pages) description of the Hone variety. The Hone number 6000-7000, having undergone a rapid demographic decline in the last forty years.

The nine oral vowels / i, ɪ, e, ɛ, a, ə, ɔ, o, u / divide into two +/- ATR sets: / i, e, a, ə, o, u / and / ɪ, ɛ, (a), ə, ɔ, (u) /. Besides vowel length resulting from various processes, most (but not all) of these vowels also occur contrastively long. There are also five nasal vowels, / ĩ, ě, ã, õ, ũ /.

There are three distinctive tones: high (acute accent), low (grave accent), mid (here unmarked). These can combine to give contour tones. Tones play a major role in the AM system.

14.2 Word order

Hone is strongly SVO. Interrogation, topicalisation, focus, and negation do not alter the order but use of preverbal auxiliary plus infinitive gives S AUX O V-INF, as in the following examples (see also (18b)):

(1) a **ku-zém bay dáb-ɪ**
he-like dog hit-INF
'He'd like to hit the dog.'

b **ku-zém-kú dáb-ɪ**
he-like-it hit-INF
'He'd like to hit it.'

14.3 Verb structure

Verbs have a segmental and a tonal component. Affixal verb structure is limited:

(2) SM + NEG + AM + root + suffix

A verb has four possible tone components: 1. lexical/root tone (see below); 2. a distinction between imperfective (high-toned) and Factative (low-toned); 3. the tone of the pre-stem AM marker(s); and 4. the imperative imposes a tone pattern of its own. The last two do not co-occur.

SM: There are three sets of SM: neutral, subjunctive emphatic, subjunctive non-emphatic¹. All SM sets differ from the neutral SMs by changing the tone, lengthening the vowel, or adding material. The neutral SMs are tonally all mid, except the 2p, which is high. Neutral SM's and examples are in (3):

(3) a 1s **n-/m-**, 2s **ɔ-**, 3sm **ku-**, 3sf/n **kəm-**, 1p **i-**, 2p **nén-**, 3p **bə-**

b **n-Ø-ǰí** **mé rí** **yak**
 1s-zero-sit.FAC in.LOC go
 'I am going.'

c **i-tí-yak**
 1p-"FUT"-go
 'We will go.'

d **nén-Ø-saa**
 2p-zero-do.SBJ
 'Ye should do.'

e **ɔ-Ø-wurà**
 2s-zero-woman
 'You are a woman.'

f **ku-Ø-yak**
 3s-zero-go.FAC
 'He went.'

g **kú-Ø-yak**
 3s-zero-go.SBJ
 'He should go.'

NEG: **-rì-**, **-tì-**, **(-)ká-**. See §13.6, following.

AM (in positive forms): **-Ø-** occurs in Factative and Subjunctive; **-rì-** occurs in Imperfective, Progressive, Conjunctive, "Certain Future" (see (5)); **-n̄ -rì-** Perfect; **-nə-tí-** Habitual; **-nəm-Ø-** Factative-Habitual, **-tí-** "Uncertain Future"; **mə-** Consecutive. In negatives, **-nàn-** '(not) yet' and **-náj-** '(not) ever' occur (see §6, and (15)). The Conditional **-máá-** ('if, when') can co-occur on its own or preceding HAB, FUT, and CNJ (see §13.5.4). Readers will note that **-rì-** and **-tì-** occur in various functions with various tones.

ROOT: Roots consist of a segmental and a tonal component. Most roots are short: V, CV, CVV, CVC, or CVVC. The few longer roots are either loans, reduplicated, or

¹ There are also three sets of self-standing subject pronouns: emphatic, non-emphatic, focus.

likely combinations of root and petrified extension². The extensions found elsewhere in Niger-Congo are no longer active in Jukun, although segmental traces remain. Tonally these lexical patterns occur: L, LL, LH, M, MM, H, HH, HL.

Suffix: With one exception, the extensions and final vowels occurring in other Niger-Congo languages have vanished. Ignoring the frozen extensions (see fn. 2), four suffixes occur: *-è/-è* ‘imperative’ (see §14.5.1); the OM (see (1b)); *-é/-é* ‘negative’ (see §14.6), and the new valency-changing suffixes (see §14.7.1). OM and *-é/-é* ‘negative’ co-occur, apparently in that order, and undergo mutual assimilation. No other combinations of these suffixes were found, so nothing can be said of their ordering.

14.4 Aspect, mood

Storch (1999:180) rolls all the AM forms, except reduplication and consecutive, discussed in this section and the next, together, and characterizes each as either perfective or imperfective/durative. Her definitions are part semantic, part tonal: perfectives represent situations as *abgeschlossen* (finished, completed) and are L-toned, whereas imperfectives represent incomplete situations and are H-toned. Two forms combine imperfective and perfective, her “Aorist-Durative” (‘We were verbing’) and her “Perfective-Habitual” (‘We used to verb’). While not denying the possibility of dividing (T)AM forms in this way, we divide the aspectual/modal spectrum somewhat differently, using Factative and Imperfective to refer not to whole classes of categories but to individual categories.

We analyze Hone in terms of aspect, as follows. We use our terms and put our abbreviation, and her terms, where different, in brackets.

14.4.1 *Factative* (FAC, Storch’s Aorist).

Tonally (L) and morphologically (-Ø-) unmarked, it represents “perfective situations, which occurred just before the time of speech or at a certain point in the past”³. It is mainly used in narratives, and in descriptive texts such as recipes and instructions. Linked to the FAC are the:

Factative Progressive (Aorist Durative), which is formally as the FAC but has postposed *naa* ‘be (in/at)’ and refers to situations ongoing at the time of reference (‘was verbing’).

² Typical frozen extensions are seen in: *-fuu* ‘open’ > *-fu-n* ‘untie’, *-fu-k* ‘hollow out’. Some stems are modified by tonal change (*-kààp* ‘hollow out’, *-kaap* ‘dig’), ablaut (*-gyán* ‘lose’, *-gyà* ‘be lost’), or changing the voice value of the initial consonant (*-bàn* ‘take’, *-pàn* ‘seize’). None of these is productive today.

³ Storch says that the verbs ‘know, say’ occur only in the Factative. Are there other such?

The Factative Habitual Formally as the FAC but with preposed Habitual **-nəm-** (so **-nəm-Ø-**), refers to actions done habitually in the past ('used to verb'). Examples of these three:

- (4) a **ku-Ø-yak** 'He went.' (FAC)
 b **ku-Ø-yak naa** 'He was going.' (FAC PRG)
 c **ku-nəm-Ø-yak** 'He used to go.' (FAC HAB)

14.4.2 *Imperfective* (IPFV, Storch's Present).

Represents a situation which is not completed (abgeschlossen), carried out at the time of speech, or repeatedly, or continuously. It can include future reference (1999:187). Linked to the Imperfective are the following:

Progressive (PRG), representing an action currently being carried out. It is formally IPFV but has postposed **naa**.

Futures

Storch has two "futures", a "Certain Future" and an "Uncertain Future": we keep her terms but treat them as moods/aspects, not tenses. The Certain Future is morphologically and tonally the same as the Imperfective (see examples in (5) a,b,d,and e for small differences of detail in some persons). There is little doubt the Certain Future derived from the Imperfective. It refers to a situation just about to take place – but this is not so much a time reference as a subjective judgement, because it, the Imperfective, and the Uncertain Future are all shown referring to tomorrow. IPFV is said to refer to an act not yet begun, whereas the Uncertain Future to an act prepared but not yet begun.

Conjunctive (CNJ): formed from the Imperfective by postposing **fa** (see §14.5.2).

The Habitual (HAB) may also be linked to the Imperfective - it has **-tí-** instead of **-rí-**, for which the reason is unclear. Examples of these (for Conjunctive, see §14.5.2, below);

- (5) a **ku-rí-yak** 'He goes, is going, will go.' (IPFV)
 b **n-tí-yak** 'I go, am going, will go.' (IPFV)
 c **ku-rí-yak naa** 'He is going.' (PRG)
 d **ku-rí-yak** 'He will go.' ("Certain Future")
 e **n-rí-yak** 'I will go.' ("Certain Future")
 f **ku-nəm-tí-yak** 'He goes habitually.' (HAB)

14.4.3 *Perfect*

The Perfect (PFT) represents a situation completed in the past. “The result of the past situation or the state brought about by the completion of the situation is emphasized” (1999:196).

- (6) **ku-ǹ-ri-yak** ‘He has gone.’ (PFT)

14.4.4 *“Uncertain Future”*

The “Uncertain Future” represents a not yet prepared or not yet begun future situation. Its time of completion not stated, and its range of reference may also include tomorrow.

- (7) a. **ku-tí-yak**
3s-“FUT”-go
‘He will go.’
- b. **ákè ku-tí-yak òyín à-kíy**
perhaps 3s-“FUT”-go day tomorrow
‘Perhaps he will go tomorrow.’

Another non-inflectional process involved in aspectual reference is reduplication. It appears in some petrified forms, where the simplex no longer exists, and in a limited set of other verbs, where the unreduplicated form still exists. In both cases, it indicates repeated, persistent, or intensive action, or it indicates middle voice meaning and at least in the second case, tonal modification accompanies the reduplication.

More relevant to us is an active process apparently affecting many verbs, best called triplication, and also accompanied by tonal modification, described as “unsystematic”. Storch calls this the Intensive, describing an action which is persistent, repeated, or thorough. (The Intensive could be a Pluractional, but there are not sufficient examples to judge.) Its exact meaning often has to do with the meaning of the lexical verb. It is shown co-occurring with the Factative and the Imperfective. Examples:

- (8) a. **n-Øsaa-saa-saa**
1s-zero-do-do-do.FAC
‘I went to a lot of trouble, tried very hard.’
- b. **ku-Ø-dáp-dáp-dáp-kù**
3s-zero-beat-beat-beat-3s.FAC
‘He hit him and hit him and hit him, beat him to a pulp.’
- c. **ku-dáp-kù dáp dáp dáp** as preceding (FAC)
- d. **n-tí-kyég a-kyék kyé-kyé-kyék**
1s-IPFV-chop PART-chop chop-chop-chop
‘I chop everything off.’

14.5 Other categories

14.5.1 Imperative

The Imperative consists of suffixal /-e, -ɛ/ carrying a tone whose underlying quality is unclear. In seven of the twelve verb classes it surfaces as H, in the other five as L. The vowel undergoes harmony with the root vowel. The singular has no prefix, the plural has **nén-**. There is also a 1p Hortative (‘Let us verb’), with prefixal **í-**. The 2s and the 1p are avoided when addressing elders. Examples:

(9)	Verb	Imperative (s then p)	“Hortative”
	-yak ‘go’	yàg-è, nén-yàg-è ‘Go’	i-yàg-è ‘Let’s go’ (HOR)
			há-á í-yak let-IMP we-go ‘Let’s go’ (SBJ)
	-gaan ‘roll’	gaan-é, nén-gaan-é	
	-wu ‘hide’	wu-ú, nén-wu-ú	
	-kèn ‘end’	kèn-é, nén-kèn-é	

14.5.2 Subjunctive (SBJ), Conjunctive (CNJ)

The Subjunctive consists of a H-toned SM, a zero AM morpheme, no suffix, and the root keeps its lexical tone. It is the only form with a H-toned prefix. The Subjunctive and the Factative differ only tonally. Expressing as it does events that have not happened, the Subjunctive occurs in (polite) commands, wishes, and certain kinds of subordinate clause (“We want that you verb-SBJ”).

- (10) a. **ku-Ø-yak** ‘He went.’ (FAC)
 b. **kú-Ø-yak a lək** ‘He should go home.’ (SBJ)

The Conjunctive expresses “a form of possibility, in the senses of ‘I certainly should, I could’, but a politer command or a suggestion may also be implied (‘it would be better if you...’)”. It is formed by placing the particle **fà** after the verb or clause finally. This particle occurs in neighboring dialects and languages in the sense of “really, absolutely, in all cases”. To form the Conjunctive the particle is most often added to the Imperfective (“present”) but in 3s, 2p, and 3p it can be added to the Subjunctive. Examples:

- (11) a. **n-tí-ʒì** **bíʒùù** **fà**
 1s-IPFV-eat food CNJ
 ‘I should eat.’

- b. **ku-rí-yak fà**
 3s-IPFV-go CNJ
 ‘He should go.’
- c. **ákú-miy⁴ tánù fà**
 EMPH.SBJ.3s-buy house CNJ
 ‘He ought to buy a house.’

14.5.3 Consecutive (CNS)

If two or more actions follow each other in a temporal sequence, the first carries AM marking and the others are marked by the consecutive prefix **mè**. In all Storch’s examples, the first verb is in the Factative:

- (12) **bè-Ø-ǰár mè-ǰáŋ òirbɛɛ**
 3p-zero-run.FAC CNS-meet one another
 ‘They ran and met one another.’

14.5.4 Conditional (CND)

As mentioned in §14.3, the Conditional **máá** can occur as an independent conjunction (Storch 1999:198, but no examples were found), or can combine with the Habitual, both “Futures”, and the Conjunctive. In most combinations it precedes the other AM morpheme. It occurs in positive and negative clauses, and the conditional clause may precede or follow the main clause. When the **maa**-clause precedes the main clause, the **máá** translates as ‘if, when, whenever’, but when it follows, it has different translations. It is essentially timeless. This is quite complicated and we do not deal fully with it. Some examples:

- (13) a. **ku-máá-yak** ‘When 3s go....’ or ‘Whenever 3s went...’
- b. **áké ku-máá-yak**
 IRR 3s-CND-go
 ‘If he went, if he were to go...’
- c. **i-yag-zè-pɔn kɛ-máá-ŋwúŋ**
 1p-go-COMP⁵-spread.out 3s-CND-be.dry
 ‘We went to spread it out till it was dry.’
- d. **n-nɛm-máá-sóm sómu**
 1s-HAB-CND-work work
 ‘When I used to work...’

⁴ The emphatic subjunctive SM, one of the several subject pronouns mentioned in §14.3.

⁵ According to Storch, the Completive derivational suffix (COMP) represents an action completely finished, or done to completion (rather like ‘drink up’).

- e **bè-tì-máá-sóm** **sómu mètɛ**
 3p-NEG-CND-work work NEG
 ‘If they don’t work/haven’t worked...’

14.6 Negation

Verbal and non-verbal negation differ (and may combine). Non-verbal negation negates object or noun phrase by postposing an independent negative morpheme **mètɛ**, which negates the object, or **bánètɛ** which acts as a negative copula (‘does not exist, is not present’):

- (14) a **ká-yag(-é)** **bɛr-Kààsàà** **mètɛ**
 NEG-go(-NEG) Kasan Dare NEG
 ‘Don’t go to Kasan Dare.’
- b **kín-áá** **bánètɛ**
 head-his NEG
 ‘He is disturbed = his head not (present).’

Verbal negation involves a pre-stem morpheme and a suffix. Storch distinguishes three forms of verbal negation: Imperative/Hortative/Conjunctive/Subjunctive (pre-stem **ká-**) versus Factative alone (pre-stem **-rì-**) versus “Indicative” (pre-stem **-tì-**) (Storch 1999:207), in nearly all other forms. All have in common suffixal **-é/-ɛ** (with assimilation to the stem vowel), which Storch says negates (the lexical content of) the verb. They differ in what precedes the stem and Storch says the pre-stem morphemes negate the modal or aspectual value of the verb⁶. While the combination of **ká** and suffix is clear, the distinction between Factative and “Indicative” is less convincing, for several reasons: 1. Factative is, after all, an Indicative, and 2. **tì** and **rì** are probably related. /rì/ has several shapes, depending on phonological or functional context: [ri, di, ti] (1999:62,63), and the vowel may drop, giving syllabic [r]. /tì/ occurs as [tɛ̃] in the Imperfective and Progressive (see (15j, k)). In least one context (after 1s **n-**), forms with /rì/ and /tì/ are structurally and tonally homophonous. All this suggests that the distinction between negative /rì/ and /tì/ is recent and probably derives from *rì⁷. Examples:

- (15) a **ká-yag-é, nén-ká-yag-é**
 NEG-go-NEG
 ‘Don’t go (s, then p, IMP)’

⁶ If this is true, then it is similar to many Bantu languages, where suffixal **-i** negates the lexical content whereas pre-stem morphemes are associated with denial of (T)AM values.

⁷ Storch also suggests a second possibility - that /tì/ derives from older /ti/ ‘say’.

- b **ɔ́-ká-yag-é, í-ká-yag-é, nén-ká-yag-é**⁸
2s-NEG-go-NEG
'2s, 1p, 2p shouldn't go (SBJ)'
- c **ɔ̀-rì-yag-é** 'You didn't go.' (FAC)
- d **n-tì-yag-é** 'I didn't go.' (FAC)⁹
- e **ɔ̀-tì-yag-é** 'You didn't go, haven't gone.' (PFT)
- f **n-tì-yag-é** 'I didn't go, haven't gone.' (PFT)
- g **bə̀-tì-yag-é naa P. mèn**
3p-NEG-go-NEG PRG P. NEG
'They weren't going to P.' (PFT PRG)
- h **nén-nàn-tì-pán-kó rí**
2p-yet-NEG-catch-him FOC
'Ye have not caught him yet.' ('not yet' Perfect)
- i **ì-tì-nán-yag-é** 'We never go, have never gone.' (HAB)
- j **ì-tè-f-ɜ́ák ku-péne**
1p-NEG-IPFV-play him-front
'No one bothers/will bother with him.'
(= 'We don't /won't play in front of him.')
- k **ì-tè-f-waa naa zaapèr mèn**
1p-NEG-IPFV-drink PRG water NEG
'We are not drinking water.'
- l **ì-nàn-tè-f-waa**¹⁰ zaapèr mèn
1p-yet-NEG-IPFV-drink water NEG
'We aren't drinking water yet, won't drink water yet.'

It is worth mentioning that Storch provides a 'negative equivalent' for nearly all positive forms, with two exceptions. One is that Subjunctive/Conjunctive/Imperative have but a single negative. The other is that her "futures" have no obvious negative – they can only be negated as in (15j) above, which supports the view that they are probably not "future tenses".

⁸ As can be seen, 2s IMP and SBJ differ by the absence versus the presence of an SM, whereas the 2p forms are identical.

⁹ Storch says the Perfective negative expresses that the situation described by the negated act is completely finished: "it cannot be expanded by temporal or modal elements and is thus purely aspectual". She says it "underlies all other negated forms which express past actions and events". With stative verbs, it is rendered in German and English by a present, e.g. 'We don't like').

¹⁰ (15h, l) are the only NEGs where a piece of the AM marking precedes the NEG morpheme.

15

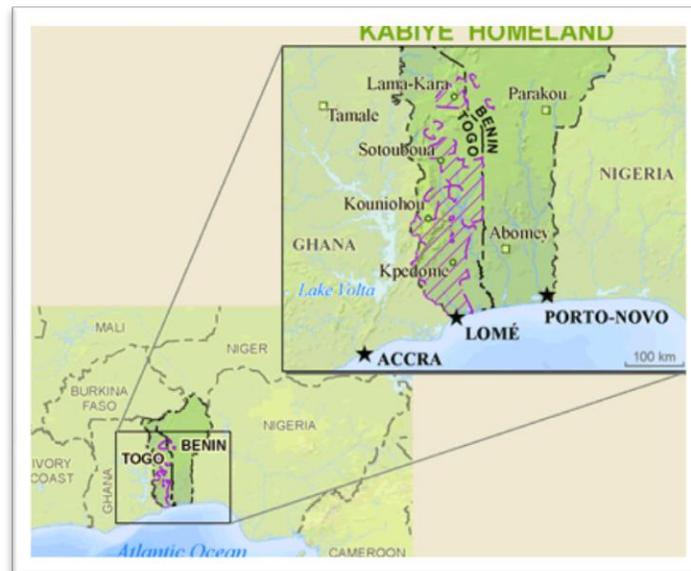
Kabiye

(Gur, Grusi)

Sarah Rose

15.1 General

Kabiye is a Gur language spoken by some 800,000 people (Roberts 2002) primarily in Northern Togo, where it is a national language, but with small pockets in Benin and Ghana (Grimes 2002). Because of political events in recent years, many Kabiye speakers have relocated to the capital city Lome, a predominately Ewe-speaking community. Much intermarriage (between Kabiye men and Ewe women) has led to children of such couples being more fluent in Ewe; consequently, Kabiye is considered under threat. Sources for this chapter include Lébikaza (1999), Roberts (2002), Essizewa (2007) and Collins & Essizewa (2007).



Map source: Anonymous. Joshua project website

Kabiye has nine contrastive vowels (/i, ɪ, e, ε, a, ɔ, o, ɒ, u/), vowel harmony which moves from left to right, and two tones: high (marked with an acute accent) and low (unmarked). There are six noun classes, marked at final, with agreement marked on (following) adjectives:

- (1) a **kelimi-yé** **kɪsɛmɪ-yɛ**
 hen-Class3 (singular) red-Class3 (singular)
 ‘a red hen’
- b **kelém-é** **kɪsɛmɪ-e**
 hen-Class3 (plural) red-Class3 (plural)
 ‘red hens’

15.2 Word Order

The basic word order is S AUX V O X:

- (2) **e-kélesi-γ** **ɖeési**
3s-rinse-IPFV pots
'He is rinsing cooking pots.' (Lébikaza 1999:332).
- (3) **hal-áa** **ɖɔŋ¹** **lú-u** **lím**
woman-p PRG draw-INF water
'The women are drawing water.' (Lébikaza 1999:297)
- (4) a **ñé-héŋ** **ká-γ** **léb-úu** **lakó taá**
2s-sheep FUT-IPFV lose.self-INF bush in
'Your sheep will get lost in the bush.' (Lébikaza 1999:336)
- b **Somiyé yáki** **cescéé** **kífalíw**
Somiyé buy.IPFV bike new
'Somiyé is buying a new bike.' (Lébikaza 1999:356)

15.3 Verb Structure

15.3.1 Simple verb²

The structure of a simple verb is as follows:

- (5) (SM)-root-(TAM/EXT)-TAM/FV³

SM: A subject marker is obligatory only with a pronominal subject (as in (2), above), but not necessarily with a nominal subject (as in (3) and (4)). Pronominal subjects include 1s **ma-**, 2s **ŋ-**, 3s **e-**, 1p **ɖi-/é-**, 2p **f-**, 3p **pa-**.

EXT: There are several possible extensions (a maximum of three may appear), some of which are illustrated below.

- (6) Causative: **-zi-/si-**

Lébikaza (1999:281) notes that this derivational extension has no underlying tone. It assimilates in feature [+/-ATR] to the root vowel but dissimilates in tone: surface tones are the opposite tone of the radical or the base:

¹ The progressive auxiliary (from verb **ɖɔm** 'to go, walk') is discussed in §15.6.

² Here "simple" indicates a one-word predication containing a single verb—by definition, the main verb. This type of verbal construction is what Welmers referred to as a "primary construction" (1973:344).

³ Except in the case of **na**, which behaves anomalously, showing a great deal of "functional polysemy" (Lébikaza 1999:284, 288, nt. 23).

- (13) **e-wó-ki-na-aγ háǎá-áa lím ‘lé ma-na-í wokínay**
 3s-go-ITR-EXT-IPFV farmer-p water when 1s-see-PFV carrying
 ‘I saw him while he was carrying water to the farmers.’ (Lévikaza 1999:286)

TAM: The PFV/IPFV aspectual split in Kabiye is marked both morphologically and by tone patterns associated with each of these two aspects (discussed at greater length below. Here are mentioned only the main morphological markers which appear at final).

Tense and aspect markers are generally appended to the verbal stem and follow any extensions (except in the case of **na**, above). These binary aspectual markers are exemplified in the following table:

- (14) Aspect marked at final: PFV IPFV
 -á **-kɪ/-γ**

There is a third aspect, which Lévikaza calls “aorist” which is unmarked for either of the two major aspects (perfective or imperfective). It is discussed and exemplified below.

- (15) Examples of perfective aspect marked at final⁴:

- a **pe-kelem-á leb-á**
 3p-chickens-3p get.lost-PFV
 ‘Their chickens are lost (have got themselves lost).’ (Lévikaza 1999: 272)
- b **Kofi wób-á sukúli**
 Kofi go-PFV school
 ‘Kofi went to school.’ (Essizewa 2007:31)

- (16) Examples of imperfective aspect marked at final:

- a **píya lééyi-γ**
 children play-IPFV
 ‘The children are playing.’
- b **á lá-kɪ tɔmíye**
 who work-IPFV work
 ‘Who is working?’
- c **sí-sɪ-kɪ**
 3p-die-IPFV
 ‘They are dying.’ (Lévikaza 1999:271)

⁴ These examples could certainly fall under the designation of “factative”, as the same marker (final vowel **á**) is interpreted two different ways, depending on whether the verb is stative (example a) or active (example b). There are complications with this interpretation, however.

With verbs of state, Lébikaza (1999:290) indicates that a perfective is understood to be “atemporelle” (17a) and is generally rendered as a present, whereas an imperfective has future reference (17b):

- (17) a **e-piyi-a**
 3s-black-PFV
 ‘He is black.’
- b **e-píyí-γ**
 3s-become black-IPFV
 ‘He will become black.’

There are two other items which occur at final which are identical in shape, but differ in tone. These are the infinitive marker **-ɔ̄** with tone pattern HL, and the “descriptive” **-ɔ̄** with high tone in the IPFV aspect, and HL in the PFV (1999: 226, 227).

FV: **-ɔ̄** /HL/ Infinitive marker.

The Infinitive marker interacts with the tonal qualities of the respective root (18a). In the case of roots that end with **-m**, only tone indicates the infinitive form (18b):

- (18) a **se** /H/ + **-ɔ̄** /HL/ > **sé-ɔ̄** ‘to run’
- b **ɔ̄m** /L/ ‘walk’ > **ɔ̄m** ‘to walk’

The infinitive form plays an important role in the formation of Focus constructions, discussed below.

FV: **-ɔ̄** /H/ The Descriptive (DES). Unlike Delord (1976:125) who considered the descriptive to be an aspect, Lebikaza considers it rather a mood (1999:341) which may appear in several aspects (IPFV, PFV, HAB). The descriptive marker (with associated tone pattern) is added to a stem already characterized for aspect (Lébikaza 1999:341ff).

- (19) Verbs **lab** /L/ ‘do’ **sidi** /LH/ ‘mix’

a Descriptive (Imperfective) (marked with **ɔ̄** with tone pattern H)

Root	IPFV base	Addition of Descriptive Marker	Surface
lab	lab-kɪ > lakɪ	lakɪ-ɔ̄	lakɔ̄ɔ̄
sidi	sidi-γ	sidi-γ-ɔ̄	sidiγɔ̄

b Descriptive (Perfective) (marked **ɔ̃** with tone pattern HL)

Root	PFV base	Addition of Descriptive Marker	Surface
lab	láb-	lab-ɔ̃	labɔ̃
sidi	sidi-	sidi-u	sidiú

15.3.2. *Complex verbs*⁵

The structure of a complex verb is as follows:

- (20) a SM-AUX-ASP V (INF)
 or b SM AUX-ASP V (INF)
 or c SM-AUX-V-TAM

Because such complex predicates include “auxiliary” or “semi-auxiliary” verbs, they are discussed at length in the section dealing with Auxiliaries (§15.6), where examples of each of these structures may be seen.

15.4 Aspect

Lévikaza describes a three way aspectual split, with the major differentiation between perfective (*accompli*) and imperfective (*inaccompli*) marked morphologically at final, and by associated tone patterns, with the aorist unmarked for either of these aspects. Subsets of imperfective (HAB, ITR, PRG) may be marked at extension or by the use of auxiliaries.

15.4.1 *Perfective aspect*

Perfective is marked by a high toned suffix **-a** which appears at final⁶. It indicates that an action is in some sense complete, but does not specify time frame and may be interpreted either as a past (examples in (15)) or as a gnomic present:

- (21) **akpadɪ-áa** **sɔɔl-á** **píya**
 old folk-p love-PFV children
 ‘Old folks love children.’

15.4.2 *Imperfective aspect*

The “fundamental characteristic” of a verb in the imperfective aspect is a floating high tone which precedes the root in combination with the (low-toned) suffix /kɪ~ɣ/ (where the latter is a semi-vowel/glottal glide (1999:330) and thus may bear tone) (1999:221). Examples:

⁵ All these constructions contain an auxiliary verb (Welmers’ “auxiliary constructions” (1973:344). In c., a single word contains both the AUX and the main verb. In a. and b. an infinitival form of the main verb appears as a separate word.

⁶ See Lévikaza (1999:215,217) for factors that may affect surface tones, including the presence of a following complement or the operation of various dissimilation rules.

(22) Imperfective form of verb **lib** ('to swallow', with underlying L tone)

$$\begin{array}{ccccccc} \text{'} & \mathbf{lib} & \mathbf{-kí} & > & \mathbf{líki} & \text{(compare PFV form } \mathbf{lib -á} > \mathbf{libá}) \\ \text{H} & \text{L} & \text{L} & & \text{HL} & \text{L H} & \text{LH} \end{array}$$

Imperfective form of verb **hòlòsì** ('to sip', with underlying LHL tone)

$$\begin{array}{ccccccc} \text{'} & \mathbf{hòlòsì} & \mathbf{-y} & > & \mathbf{hólòsìy} \\ \text{H} & \text{LHL} & \text{L} & & \text{HHLL} \end{array}$$

The two suffixes (**-kí** and **-y**) which mark IPFV are allomorphs: suffix **-kí** (with underlying low tone) appears with root shapes CV**b**-, CV**m**, CV**y**-, suffix **-y** (with an underlying low tone) appears after roots ending in a vowel⁷.

Some monosyllabic verbs that end in **-m** are problematic and must be interpreted aspectually on a case-by-case basis and with care. For instance, the verb **sam** (with underlying low tone) 'praise' is subject to certain alterations after the addition of the IPFV suffix **-kí**:

(23) $[\mathbf{sam-kí}] > [\mathbf{sángɪ}] > [\mathbf{sájɪ}] > [\mathbf{sáj}]$

The final form **sáj** is thus marked for imperfective aspect, albeit subtly. The same may presumably apply to the progressive auxiliary verb **ɔɔɔ** (from verb **ɔɔm** 'go, walk'), as in example (31), and future auxiliary **kɔɔ** (from verb **kɔm** 'come') as in example (33).

The time frame in imperfective is non-past (present or future). In the absence of any specific auxiliaries, adverbs or other lexical specifiers (as in example (4) where the future AUX **kás** sets the time frame), an imperfective is understood as a present, as in example (2).

Lévikaza (1999:226,338ff) discusses a tense form based on a stem characterized for imperfective aspect which he terms *l'imparfait* which is rendered as an imperfective past as in the following:

(24) $\mathbf{mɛn-ɔɔy} \quad \mathbf{nɛ} \quad \mathbf{n-tálɪ-y} \quad \mathbf{m'bíyɔ}$
 1s-leave-IPFV(Past) and 2s-arrive-IPFV so
 'I was leaving, and behold, you arrive!' (1999:341)

The simple form of this tense involves the addition of the suffix **-ay** with tone pattern (LH) to an "Imperfective base" (that is, a root already marked for Imperfective aspect). Several examples appear below (underlying tones given in following brackets):

(25) Root shape: Imperfective base: Imperfect: Surface:

CV **ma** /L/ 'jump' > **may-** > **may-ay** > **maway**

CV**b**- **leb** /L/ 'lose self' > **leki-** > **leki-ay** > **leka**

⁷ According to Delord (1976:451) these are diachronically related.

CVV **caɣ** /LL/ ‘stay’ > **cakɪ** > **cakɪ-aʔ** > **cakaʔ**
 CVCV/CVCVCV **sidi** /LH/ ‘mix’ > **sidi-aʔ** > **sidáaɣ**

Imperfective aspect is also rendered using various auxiliary verbs, discussed below in §15.6.

15.4.3 Aorist

There is a third type of aspect which Lébikaza refers to by the difficult term “aorist”. By this he means a verbal form which is marked for neither of the other two types of aspect--perfective (an action which has been in some sense completed) and imperfective (an action which is ongoing). The unmarked aorist refers to the action itself. It appears in several negative forms (see §15.8), in subordinate clauses (examples in (27)), and perhaps in the imperative. Here are some illustrations of the formal differences between the three:

(26) Verb **lub** /L/ ‘forge’ verb **cósi** /HB/ ‘answer’

PFV	lub-á	cósi-a > cósa
IPFV	lú-ki	cósi-ɣ
AOR	lú	cósi

The following examples show the use of the aorist in subordinate clauses. In (27b and c) it functions as a subjunctive:

(27) a **píya** **ká-koo** **lé** **po-ɖoo fɛm-á**
 children FUT-come.AOR when 3p-mother wake.self-PFV
 ‘When the children (will) come, their mother will be awake.’ (Lébikaza 1999:329)

b **ɖi-sé-ɣ** se **ɖé-píya** **ɪ-ká-koo**
 1p-believe-IPFV that 1p-children NEG-FUT-come.AOR
 ‘We believe that our children won’t come.’ (Lébikaza 1999:329)

c **man-tíí-wo-kí** **né ɣ-koo**
 1s-expectative-go-IPFV and 2s-go.AOR
 ‘I left hoping that you might come.’ Lébikaza 1999:334)

15.6 Auxiliaries

15.6.1 Grammaticalized auxiliaries

Several (grammaticalized) auxiliaries and (independent) “semi-auxiliaries” may combine with a main verb to form what Lébikaza calls “complex” predicates. It is these elements which carry tense, aspect, and mood marking and the SM. The main verb follows in the infinitive form:

- (28) Future auxiliary **ká** **pa-ká-y** **léb-u**
 3p-FUT-IPFV lose.self-INF
 ‘They will get lost.’
- (29) Near future auxiliary **wízi** **pa-wízi** **fém**
 3p-NFUT get.up.INF
 ‘They will soon get up.’
- (30) Progressive aspect auxiliary **ɔaʔna** + Main verb (Infinitive)
- a **píya** **ɔaʔna** **lú-u** **lím**
 children PRG draw-INF water
 ‘The children are drawing water.’ (1999:296)
- b **pa-ɔaʔna hiz-úu** **nándɔ**
 3p-PRG cut.up-INF meat
 ‘They are cutting up the meat.’ (1999:337)
- (31) Progressive aspect auxiliary **ɔɔŋ** ‘go/walk’ + main verb (Infinitive)
- pa-ɔɔŋ** **hiz-úu** **nándɔ**
 3p-PRG cut.up-INF meat
 ‘They are cutting up the meat.’ (1999:337)
- (32) Habitual aspect **tíí** (tone pattern HH) + imperfective main verb
- a **man-tíí -wó-ki** **me-egbéna** **kujuká** **wíye**
 1s-HAB-go-IPFV 1s-house.maternal.uncle Sunday day
 ‘I usually go to find my maternal uncles on Sunday.’ (1999:337)
- b **man-tíí-lákɪ** **tɔmíye moŋ-kudúyíw tɛé**
 1s-HAB-do-IPFV work 1s-room under
 ‘I habitually work/am usually working in my room.’ (1999:232)

15.6.2. Semi-auxiliaries

Semi-auxiliaries are full verbs (with such meanings as ‘begin’, ‘end’, ‘finish’, etc) which are employed as auxiliaries. As such, their meanings are somewhat bleached: for instance, full verb **tɛm** means ‘finish’; when it is employed as an auxiliary element, it means ‘already’. They are usually self-standing elements. They carry the TA information and are followed by the main verb in the infinitive. The example below shows the auxiliary **kɔm** ‘come’ which functions as a future (see above for the explanation of the aspectual marking on the AUX):

- (33) **kóláa káj lúb-úu agbá**
 smiths come.IPFV forge-INF lances
 ‘The blacksmiths will make lances.’ (1999:297)

15.6.3 ‘be’ verbs

Perhaps the most common (‘default’?) copula is **wε** ‘be’ (34a). The negative of this is the invariable copula **fε yí** ‘be.not’ (34b). (Collocational) copula **ke** ‘be’ appears in complementary distribution with **wε** ‘be’ and in combination with a noun or an adjective to express identity (as in ‘My friend is a doctor’ (35) or a state (36):

- (34) a **ε-háy wε kimeléndo**
 3s-dog be stupid
 ‘His dog is stupid.’ (1999:300)
- b **ε-háy fεyí kimeléndo**
 3s-dog be.not stupid
 ‘His dog is not stupid.’ (1999:301)
- (35) **mε-εgbaadó ké dákúó**
 1s-friend be doctor
 ‘My friend is a doctor.’ (1999:301)
- (36) **meη-kpelaý ké kíkpedaý**
 1s-chair be black
 ‘My chair is (a) black (one).’ (1999:301)

Combined form **wεná** = ‘have’ (= ‘be with’) is exemplified below:

- (37) **háǰáa wεná súη sakiyé**
 peasants have guinea. fowl many
 ‘The peasants have many guinea fowl.’ (1999:295)

15.7 Other Categories

15.7.1 Focus

Verb focus is accomplished by copying the verb in the infinitive form which must appear at the end of the verb phrase:

- (38) **εsó yá-kɪ ké-ké-sɪ kí yáb-ɔ**
 Esso buy-IPFV bean.cakes FOC buy-INF
 ‘Esso is just *buying bean cakes*.’ (Collins & Essizewa 2007:192)

- (39) **esó ɛɛ-yɔɔd-ɔ** **kí** **yɔɔd-ɔ**
 Esso NEG-speak-DES FOC speak-INF
 ‘Esso is not *speaking*.’ (He is laughing) (Collins & Essizewa 2007:198)

Verb focus may appear with the imperative. Clause internal object focus is exemplified in (40a), verb focus in (40b):

- (40) a **ya** **kékésɪ** **ɖeké** **na**
 buy bean.cakes only FOC
 ‘Buy only *bean cakes*!’ (Collins & Essizewa 2007:199)
- b **ya** **kékésɪ** **kí** **yáb-ɔ**
 buy bean.cakes FOC buy-INF
 ‘Buy bean cakes.’ (as opposed to stealing them)

15.7.2 *Mood*

Kabiya has an imperative (used only with second person) for direct commands and a jussive (used with first and third persons) for injunctions and wishes. Imperatives may be either perfective (using the aorist form), or imperfective (by adding the IPFV suffix **-kɪ** to the radical):

- (41) **Imperative** (verb **lab-** /L/ ‘do’)

Perfective Imperfective

la ‘Do (it)!’ **la-kɪ** ‘Continue doing it!’

- (42) **ya** **kelémá** **nɛ súŋ**
 buy.IMP chickens and guinea fowl
 ‘Buy chicks and guinea fowl!’ (1999:349)

Imperatives seem generally to be built on what Lébikaza calls the verbal radical, which looks suspiciously like the aorist, in that it is minimally marked (except in the case of the imperfective imperative). Note that in CVC verbs in the Imperative, the final –C is deleted (**lab** > **la**), as in example (26)⁸.

Marking of the imperative also varies with the structure of the root. For instance, in monosyllabic verbs with inherent L tone, the Imperative is signalled by vowel lengthening: **paa** ‘dance!’ from verb **pa** /L/ ‘dance’. See Lébikaza 1999:347ff for a full array of possibilities.

The jussive is marked tonally: a H tone is located before the radical. The H tone which precedes the base form of the verb (PFV or IPFV) is realized either on the subject pronoun (43a) or, if there is none, on an epenthetic vowel (43b):

⁸ This final –C appears to be linked to the perfective aspect as in Lébikaza 1999:343, where the full CVC structure is termed the perfective base to which the descriptive morpheme **-ɔ** may be added (see example (19)).

(43) **Jussive**

- a **qí-sa** **esó** (verb **sam-** ‘praise’)
1p.JUSS-praise God
‘(Let us) praise God!’ (1999:347)
- b **píya** **f-koo** (verb **kam-/L/** ‘come’)
children JUSS.come
‘May the children come!’ (1999:306)

The following examples show the formal differences between the imperative and the jussive:

(44) verb **tib-** /L/ ‘descend’

- a **tii** **loko** **taá**
descend.IMP mine shaft in
‘Go down into the mineshaft!’ (1999:348)
- b **pé-tii** **pów** **taá**
3p.JUSS-descend hole in
‘Would that they would go down into the hole!’

As above, mood may also be conveyed by the use of auxiliary modal verbs. The following examples show such constructions using the AUX **pizi** /LL/ ‘be able’ (45a), indicating possibility, AUX **wená** ‘must’/‘have to’ (45b), indicating necessity, and AUX **ca-** /L/ ‘want’ (45c), indicating wishes or desires:

- (45) a **sója-náa** **pízi-γ** **sé-u**
soldiers-3p be able-IPFV run-INF
‘The soldiers can run.’ (1999:293)
- b **η-wená** **wób-tú** **péede**
2s-must.PFV go-INF there
‘You have to go there.’ (1999:295)
- c **pa-cá-γ** **hil-tú** **qózi**
3p-want-IPFV prepare-INF sauce
‘They want to prepare the sauce.’ (1999:294)

15.8 Negatives

The primary negative appears in the perfective aspect (with what Lébikaza calls the “aorist” form of the verb (see above)). It consists of **ta-** (with a low tone) which is located after the SM, if there is one, and before the verbal base:

- (46) a **ɛ-ta-sé**
 3s-NEG-run.AOR
 ‘He has not run.’ (Lébikaza 1999:309)
- b **pɛl-áa ta-leeyí**
 girl-p NEG.play.AOR
 ‘The girls haven’t played.’ (Lébikaza 1999:328)

Default prohibitions are expressed by **taa** /LL/ and the use of the aorist form of the verb both in the imperative (47a) and the jussive (47b), both from Lébikaza (1999:354):

- (47) a **taa-kízi** **kóye**
 PRH-refuse.AOR medicine
 ‘Don’t refuse the medicine!’
- b **pá-taa-kízi** **kóye**
 3p.JUSS-PRH-refuse.AOR medicine
 ‘They must not refuse the medicine!’

There is as well a continuative prohibitive:

- (48) **taa-la-ki mbó**
 PRH-do-IPFV that
 ‘Don’t do that!’ (Lébikaza 1999:355)

Negation in imperfective aspect is marked tonally by two low tones, realized either on the SM (49 a,c), or, if there is none, on an epenthetic vowel /ɪ/ (49b) which assimilates in [+/-ATR] to the verb root:

- (49) a **ɔ̄ii-sé-y**
 1p.NEG-run-IPFV
 ‘We aren’t running.’ (Lébikaza 1999:309)
- b **hal-áa ii-sé-y**
 woman-p NEG.run-IPFV
 ‘The women aren’t running.’ (Lébikaza 1999:309)
- c **maa-wo-ki peéde**
 1s.NEG-go-IPFV there
 ‘I’m not going there.’ (Lébikaza 1999:334)

15.9 Relatives

Dependent relative clauses may be delineated by a clause-initial particle **mbá** (which includes class-based anaphoric reference) and a deictic element **yó** which appears at the end of the clause:

- (50) **hal-áa mbá ma-na-á yó pa-lí-na Lassa**
 woman-p REL 1s-see-PFV DEIC 3p-leave-EXT Lassa
 ‘The women *whom I saw* went/have gone to Lassa.’ (Lébikaza 1999:276)

Relative (subordinate) clauses may also be signalled by focus, where the main clause is preposed and focussed, and the relative postposed:

- (51) **píya caan-áa ke sukúli ñó w-tó níní-y**
 children father-p FOC school principal look.for-IPFV
 ‘These are the children’s parents *whom the principal is seeking*.’ (Lébikaza 1999:279)

16

Kisi

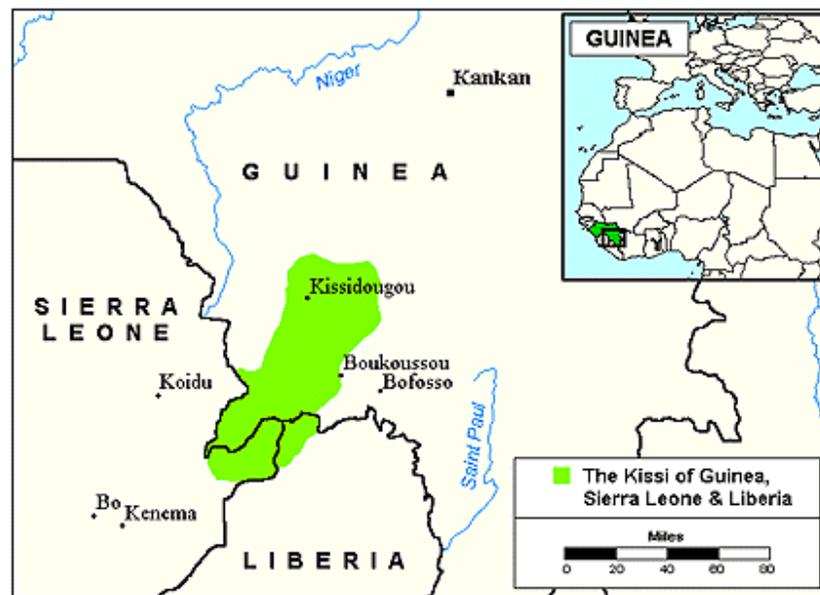
(Bulom, Mel, Southern, Atlantic)

Sarah Rose

16.1 General

Kisi (also commonly Kissi, representing French spelling), is the language of some 500,000 speakers, of whom the majority (60%) reside in Guinea, with the rest split between Liberia (20%) and Sierra Leone (20%). Childs (1995:9-10) identifies “at least two different dialects”, Northern and Southern Kisi, following, roughly, the political division between Guinea and Liberia-Sierra Leone, suggesting that the Northern dialect could be further sub-divided. Speakers are found over a relatively discontinuous area, and are generally surrounded by Mande speakers (Childs 1995:1,7)¹. The languages most closely related to Kisi, namely Sherbro, Mani, Bom and Krim, are located at a distance from the Kisi areas, along the distant Atlantic coast.²

The discontinuous distribution of the Southern Branch, to which Kisi belongs, is explained both by historical movements and modern political divisions. According to sources cited in Childs (1995:3), the Kisi, and a related group, the Gola, were separated from other Southern Branch groups by expanding groups of Mande speakers, sometime between the 1300's and 1700's, reaching their present inland location at the beginning of the 19th century. The establishment of recent political boundaries has further segmented the unity of the Kisi as a linguistic group.



Map source: Bethany World Prayer Center

¹All Kisi data are from Childs 1995, except where otherwise noted. Consequently, in examples, I generally cite only the date of his grammar (1995) and page numbers.

²Temne and Gola, sister sub-branches of the Mel sub-group, despite being located physically quite close, are, lexicostatistically speaking, not as closely related. See Childs (1995:7) for classification details.

Kisi is a seven-vowel language with contrastive vowel length, and numerous diphthongs. The consonantal inventory includes doubly-articulated segments (e.g. **kp**, an areal feature (Greenberg 1983)), a series of pre-nasalized stops (e.g. **mb**), and implosives **b** and **d**, phonetically [b̥, d̥] (1995:12, 22, 35). Consonant clusters (except for homorganic nasal-stop segments) are not allowed. CV is the basic configuration of the Kisi syllable, although closed syllables are allowed; as well, several sonorants may occur syllable-finally (1995:13). Tone is critically important in Kisi³ marking both lexical and grammatical differences.⁴ There are two level tones, H (acute accent) and L (grave accent), and two contour tones, a rising (ˊ) and a falling (ˋ)⁵. Childs also notes an “extra-high” tone of “limited distribution” (see example in fn. 5). The following is an example of the importance of lexical and grammatical tone:

- (1) **sàà** **sáà** **sàá**
 Saa grab sheep
 ‘Saa grabs the sheep’ (1995:43)

Morphologically, Kisi shares the Atlantic feature of noun classes, although its extent is relatively limited with respect to either Fula or Bijago, dividing all nouns into one of seven classes. An interesting morpho-syntactic feature of these classes is the *position* of the class markers: they appear suffixed to the noun (although Childs (1995:19) cites some evidence of a formerly prefixal structure. With this one exception, Kisi otherwise conforms firmly to “both the primary and secondary characteristics associated with VO languages” (1995:20). Because of their limited number, as well as for referential use in subsequent examples, I list the suffixes below in (2). This display requires some explanation: the leftmost column represents the pronoun representative of each class; the second column is the corresponding suffixal form attached either to independent nouns of the respective class, or to words which refer to the noun, such as adjectives.

- (2) The Noun classes of Kisi (1995:148)

Class Name (=PRO)	Suffix (=SUF)	Semantic characterization
o	-ó	Singular of all animates, some inanimates
a	-á	Plural animates

³Kisi is one of the most southerly of the Atlantic languages: Childs remarks (1995:13) that, within the Atlantic family, “tone appears only in the (geographically) southern languages and may even be disappearing there”.

⁴Many aspectual meanings are associated with specific tone patterns, e.g., the perfective has a LH tone pattern (Childs 1995:226), the imperative has a single H tone (1995:227) (see 1995:228-231 for the more involved tonal complexities of the hortatives). Habitual has all low tones (1995:224). These will be explained and exemplified when the individual aspectual meanings are discussed. It should be noted that verb stems generally have no lexical tone (Childs 1995:56). One derivational (extensional) morpheme, the “middle” verb extension (fullest form **-nuŋ**), has lexically assigned (LH) tone: **dɪ** ‘kill’ > **dɪ-nuŋ** ‘kill self’ (Childs 1995:50, 184).

⁵The little-used extra high tone is exemplified as follows:

à	dàtá	yá	>	á	dàtá	yá lé
you	condemned	me		you	condemned	meNEG
‘You condemned me.’				‘You didn’t condemn me.’ (1995:49)		

le	-léŋ	Singular inanimates
la	-láŋ	Plural inanimates
i	-é	Singular collective plants
ŋ	-óŋ	Plural collective grains, etc.
ma	-áŋ	Liquids

Generally, Kisi is left-headed: the head constituent precedes all dependent elements. Thus, adjectives typically follow their head noun, as do possessives and relatives: “The order of elements with modified nouns is Noun Stem + Noun Class Pronoun (“Pro”) followed by Adjective Stem + Noun Class Marker (“Suf”). The exception to this pattern is **o**-class nouns; pronouns do not appear after the noun stem” (1995:150). For interactions involving noun class pronouns and suffixes, see also Relatives (§16.6) and Negatives (§16.7).

- (3) **la** class **lèàŋ-là** **yùwéí-láŋ**
cutlass-PRO old-SUF
‘old cutlasses’
- ŋ** class **bèl-ŋ** **yùwéí-óŋ**
palm kernel-PRO old-SUF
‘old palm kernels’ (1995:150)
- ma** class **màŋ-mà** **yùwéí-áŋ**
water-PRO old-SUF

Subject pronouns are as follows: **í**⁶, **à**, **ò**, **ŋ**, **là**, **à** (1995:71). The **o** and **a** class pronouns are identical to the third person personal pronouns (1995:107). Object personal pronouns are **yá**, **núm/nùm**, **ndú**, **náá**, **ŋá**, **ndá**. These are cliticized when reduced.⁷

16.2 Word Order

Word order is S V (IO) (DO) (as in 4a). However, if there is an AUX, the order becomes S AUX (IO) (DO) V: in other words, the order of VO is reversed, becoming OV (4b). Only two objects may follow an un-extended finite verb; with extensions, up to three may occur (1995:249). An adposition may also ‘license’ an additional argument (1995:249). Childs indicates that only “higher” arguments (patient and beneficiary) appear between the AUX and the non-finite form of the verb: other “lower” arguments appear after the non-finite verb with an adposition (4c). The

⁶ This pronoun (and only this one) has the unusual characteristic of raising the first tone of a verb (1995:104). As well, this is the only personal pro that bears a H tone, all others being L.

⁷ Unreduced form of object pronoun **ndú** ‘it’:

í	sólí	ndú
1s	take-out	it
‘I took it out.’		

Reduced form of object pronoun **ndú** >

-ŋ: í	sólí=ŋ
1s	take out=it
‘I took it out.’ (1995:72)	

significance of vowel length and tone differences in the second and fifth examples (**kíndá** vs. **kíndàà** is not clear to me).

- (4) a S-V **sàà** **cílùl**
 Saa fat
 ‘Saa is fat.’
- S-V-DO **sàà kíndá dìòó**
 Saa close door
 ‘Saa closed the door.’
- S-V-IO-DO **sàà ké yá káníúŋ**
 Saa give me money
 ‘Saa gave me money.’
- b S-AUX-V **sàà** **có⁸** **cò**
 Saa AUX see
 ‘Saa will see.’
- S-AUX-DO-V **sàà** **wá** **dìòó** **kíndà-à**
 Saa AUX door close-IPFV
 ‘Saa was closing the door.’
- S-AUX-IO-DO-V **sàà** **có** **ndú** **kóná** **dóóŋ**
 Saa AUX him message pour
 ‘Saa will give the message to him.’ (1995:218)
- c **ò** **cò** **kòŋnǎ** **ó** **yòmndó**
 it AUX hit to tree
 ‘It will hit against a tree.’ (1995:250)

The negative particle **lé** (after a final V, **te** after final C, **ló** for emphasis (1995:125)) appears sentence final (5a), as does the focus particle **ní** (5b), (if both occur, the focus particle occurs last (Childs 1995:263)), and generally, ideophones (5c). See also §16.4.

- (5) a **í** **kóó** **sà** vs. **í** **kóó** **sá** **lé**
 1s pass judgment 1s pass judgment NEG
 ‘I pass judgment.’ ‘I don’t pass judgment.’ (1995:261)
- b **mààlón** **ó** **có** **cùùcúúwó** **ní**
 rice 3s AUX sow FOC
 ‘It’s rice he’s sowing.’ (1995:270)

⁸ This AUX is used for present or future reference. AUX **wa** is used for past reference. See §16.5.1.

- c í líndán pólókò-pólókò
 1s muddy Ideophone
 ‘I got myself muddy all over.’ (1995:134)

16.3 Verb Structure

The Kisi verb is morphologically simple (ROOT+ (EXT) + (FV)) in comparison with, say, the Bijago verb. It consists of either the verbal root or the verbal root extended by one of four suffixes⁹ occurring in the order “Causative” (= Cs), “Benefactive” (= Ben), “Middle” (=Mid), “Plural” (=Pl). Examples follow:

(6)	Stem	haŋgu	‘be warm’ (1995:174,336)
	Causative	heŋgi	‘make warm’
	Benefactive	haŋgul	‘warm for someone’
	Middle	haŋguŋ	‘warm oneself’
	Causative + Benefactive	heŋgil	‘warm for someone’
	Causative + Plural	heŋguu	‘warm many things’
	Causative + Middle	heŋgiŋ	‘be made warm’

In the case of analytic predications (involving both an AUX and a main verb), these extensions occur *only* on the main verb:

- (7) a Main verb with benefactive and middle extensions:

ò bëndúlûŋ fâl kòn fúú
 3s be.tall old-man that uselessly
 ‘He became tall for that old man uselessly.’(1995:53)¹⁰

- b Analytic construction with main verb benefactive and middle extensions:

ò co tîŋ fâl bëndùloŋ fùù
 3s AUX slightly old-man be.tall uselessly
 ‘He’s becoming tall for that old man uselessly.’(1995:53)

16.3.1 Verbal Extensions

16.3.1.1. Causative.

In its simplest form, the morpheme **-i** is suffixed to the verbal base:

- | | | | |
|-----|---|---|---|
| (8) | sul ‘be rich or (sexually) mature’ | > | sul-i ‘make someone mature; raise a child’ |
| | hol ‘adhere, stick to, be leaning against’ | > | holi-i ‘make adhere, plaster’ |
| | tend-u ‘be awake’ | > | tind-i ‘awaken’ |

⁹ The preferred shape of the Kisi verb is bi-syllabic. This has an effect on how the verb is extended as well as phonological processes (1995:171).

¹⁰ See Childs (1995:52-53) for an explanation of the tones and prosodic aspects of these examples.

If the verb ends in **-a**, the causative marker is located before the final **-a**:

- (9) **bɛnda** ‘be agreeable’ > **bɛnd-i-a** ‘make agreeable’
tosa ‘do’, ‘make’ > **tos-i-a** ‘fix’, ‘repair’

Childs suggests that “From a diachronic perspective, the final *a* may represent the remnant of another verb extension or another verbal morpheme which has lost all of the original semantic content, perhaps something like the ‘Final Vowel’ of Bantu”(1995:176).

16.3.1.2. Benefactive.

The fullest and basic form is **lul** (**cuu** > **cuu-lul** ‘carry’), **-ul** after **l, ɲ** and **m**, **-l** after vowel-final polysyllabic verbs:

- (10) **baŋa** ‘redeem’ > **baŋa-l** ‘redeem [for]’

Sometimes no material is added at all:

- (11) **yɔn** ‘send’ > **yɔn** ‘send [for]’

Sometimes, Benefactive is marked by ablaut:

- (12) **caŋ** ‘cry’ > **ceŋ** ‘cry [for]’

The benefactive has a wide and subtle range of meanings, sometimes indicating only that the beneficiary is aware of the verb’s action:

- (13) **ò yààmál yá á ylááj**
 3s yawn-BEN me with hunger
 ‘She yawned with hunger in front of me.’ (1995:182)

The participants in benefactive structures are typically animate. The benefactive can combine with any suffix, but show “particular affinity” for the causative for semantic and pragmatic reasons (as both involve typically animate sentient arguments) (1995:184).

16.3.1.3. “Middle”

Despite the terminology, this is not a voice, but an extension, although it covers much of the semantic range of “middle voice” (middle, reflexive, passive). Many of this type are stative verbs (final example).

- (14) **boli** ‘hurt’ > **boli-ɲ** ‘be hurt/injured’
tofa ‘look at’ > **tofa-ɲ** ‘look at oneself (in a mirror)’
loo ‘beat’ > **loo-nuɲ** ‘be beaten’

liwa ‘be wet’ > **liwa-ŋ** ‘be wet’

As mentioned above, this is the only extension which has a lexically assigned tone (LH). The fullest form is **-nuŋ** (**càl** ‘sit’ > **càlnuŋ** ‘seat’), but there are several phonotactically motivated allomorphs, often simply **ŋ tòm̀bòl̀à** > **tòm̀bòl̀aŋ** ‘discuss’. The middle occurs with all suffixes, less often with the benefactive (although this latter is possible: **ì dìm-úl-ùŋ** (it tell-Ben-Mid) ‘It was told’ (1995:52)).

- (15) **susu** ‘roast’
susu-l ‘roast for someone’
susu-l-uŋ ‘roast itself, get in a warm place’ (1995:190)

16.3.1.4. “Plural” (= Pluractional?)

This extension has a broad and diverse range of meanings. It is often formally identical with the causative. The most common marker of the plural is iconic: vowel lengthening (a. examples), or reduplication (b. examples):

- (16) a **candu** ‘praise’ > **caanduu** ‘praise repeatedly/over and over’
b **lau** ‘struggle’ > **laulau** ‘struggle repeatedly’

If the marker is identical to the causative, it performs in the same way, i.e., appears before the final **-a**:

- (17) **baa** ‘hang’ > **baa-y-i-a** ‘hang repeatedly’

Sometimes the vowel of a monosyllabic stem is lengthened and **-uu** is added :

- (18) **tiŋ** ‘pledge’ > **tiiŋuu** ‘pledge repeatedly’
boli ‘hurt’ > **booluu** ‘hurt in many places or many times, have many scratches or sores, be wounded; be infected with venereal disease’(1995:194) .

Yet another method involves the use of the noun class suffix **-lánŋ**, which, as already noted in (2), is the suffix denoting plural inanimates as well as being the productive, default pluralizer:

- (19) **bùmbà** ‘failing’ > **bùmbà-lánŋ** ‘failing repeatedly’

Childs remarks that “verbs” bearing this suffix are not inflected and occur only after the auxiliaries **co** and **wa**. Nevertheless, “the fact that a third way of pluralizing exists is significant with regard to renewal of the verb extension system” (Childs 1995:194). See also Childs (1987).

16.4 Aspect, Mood

As is common throughout Niger-Congo, aspect, not tense, dominates the verbal system. Kisi is no exception. The basic contrasts that are marked on the verb are the aspectual categories

(perfective, imperfective, and perfect), mood (hortative, imperative) and polarity (affirmative vs. negative). Childs (1995:222) subsumes habitual and progressive under the general term “Imperfective”. The main difference seems to be that the progressive is formed analytically, with the use of an auxiliary, and, as in examples below, by lengthening of the FV of the main (lexical) verb. Aspect and modality may be marked by a variety of means, including tone changes on the verb or auxiliary, ablaut, the use of auxiliaries, and pronoun vowel lengthening (see Childs 1995:219 for a full list). The main distinctions are exemplified below. See also the Summary of Forms in §16.6.

16.4.1 *Imperfective forms*

There is no “Imperfective” form which contrasts with either the progressive or the habitual. The progressive is formed analytically by the use of an (aspectual) auxiliary, certain tones patterns, and the lengthening the FV of the main verb. It indicates an ongoing activity, regardless of time frame:

(20) Progressive aspect (verb **cimbu** ‘leave’)

- | | | | |
|---|--------------------|-----------------------|------------------------|
| a | Progressive | ò cò cimbòó | ‘She is leaving.’ |
| b | Past progressive | ò wá cimbòó | ‘She was leaving.’ |
| c | Future progressive | ò cò wà cimbòó | ‘She will be leaving.’ |

The habitual is marked by low tone throughout, both on subject pronoun and verb. Its use signifies something happening more than once, often customary or usual action with no reference to time, beginning in the past and continuing into the present and even the future. The past habitual is marked on the subject pronoun by high tone and vowel lengthening. Stative verbs do not occur in this aspect.

(20) Habitual aspect

- | | | | |
|---|---------------|-----------------|-------------------------|
| a | Habitual | ò cimbù | ‘She (usually) leaves.’ |
| b | Past habitual | óó cimbù | ‘She used to leave.’ |

The past habitual is used if the ongoing action in the past has ceased, and the translation is, typically, ‘used to, was/is no longer’. Childs recognizes a “Perfect” with which this aspect contrasts, which indicates that the completed action still has relevance to the present. However, I see this form as a perfective with an added adverb ‘already’ (see below).

16.4.2 *Perfective forms*

Perfective forms have the verbal tonal pattern LH. The perfective usually refers to a less specific past time:

(22) **ò cìmbú** ‘She left.’

With stative verbs, the use of the perfective indicates that the subject has achieved the relevant state: ‘is X at the present time’. With active verbs, the sense is of an action that took place sometime in the past, with no time specified (1995:225). This could, therefore, be considered a factative system.

(23) a stative verb **à ɲùlú**
3p listless
‘They are listless.’ (1995:225)

b active verb **pòómbòò ò dèl lèŋ kpúŋmgbúlún**
boy he fall ground Idph
‘The boy collapsed on the ground.’ (1995:226)

Childs (1995:314, nt. 121) indicates that the perfective is also used for “the imminent future, as is also possible in Russian (Comrie 1985:20). One can compare this usage to the English slang, ‘I’m gone,’ as one is preparing to leave. This latter usage is comparable to the way it may be used in Kisi: **í kwáŋŋ** ‘I’m gone, i.e., I’m about to leave’”.

As may be seen in (24), the “Perfect” is identical, formally and tonally, to the perfective, but with the addition of the adverbial lexical item **nŋ** (which in other contexts means ‘now, already’). As noted above, the perfect indicates the ongoing relevance of a past action, something ‘currently relevant’. Childs indicates that the “tense associated with the Perfect is past, especially with active verbs” (1995:237), but with the recent or immediate past, in contrast to the unspecified past conveyed by the perfective.

(24) **ò cìmbú nŋ** ‘She has now left.’

The negative form of this aspect is also formed analytically, but using what Childs calls an “incipient aspect particle” (1995:238) **wò** ‘still’, ‘yet’:

(25) **ò cìmbú wò lé** ‘She hasn’t left (yet).’

16.4.3 *The Future*

The future in Kisi has both tense and modal value. As a tense, the use of the future indicates that an action will take place after the moment of speech. With modal value, intention or desire on the speaker’s part is conveyed (1995:234). The auxiliary **cò** is used to express the future (but compare (20a), repeated here as (26b), where the present progressive is also marked by the use of auxiliary **co**). Note that these forms are distinguished only by the lengthening (and slight change in quality) of the final vowel of the main verb). Childs says some speakers have no contrast between the future and the progressive (1995:220); given their strong formal similarity, this is not surprising.

(26) a future **ò cò cìmbù** ‘She will leave.’

b progressive ò cò cìmbòó ‘She is leaving.’

There is a future progressive which is distinguished from (26b) by the addition of the auxiliary **wa**. The auxiliaries appear in the following order:

(27) ò cò wà cìmbòó ‘She will be leaving.’

16.4.4 Mood

Kisi has three distinct moods: declarative, hortative, and imperative. The imperative is marked by H tone:

(28) **dímí wǎè**
say again
‘Repeat!’ (Childs 1995:227)

címbú ‘Leave!’

The negative imperative has a characteristic HL tone pattern, followed by the negative particle **lé**:

(29) **címbù lé** ‘Don’t leave!’

The hortative expresses the speaker’s wish that the verbal action be performed. The translation is usually ‘let’s X’ (1st plural) or so-and-so ‘should’ or ‘ought to’ (3rd). It can also be used as an indirect command. The tonal pattern for all but 2nd person is LH:

(30) ò **címbú** ‘She ought to leave/ should leave.’

The negative hortative has the opposite tone pattern, HL:

(31) ò **címbù lé** ‘She shouldn’t leave.’

16.5 Auxiliary Verbs

16.5.1 Existential auxiliaries

Kisi has two copular verbs, **wa** ‘be’, ‘stay’, ‘remain’, and its suppletive form **co**, used for ‘realis’. As above, **có** is used for present and future reference, **wa** for “irrealis, past, and all other distinctions” (Childs 1995:120):

(32) a **sàà có ní**
Saa is FOC
‘It’s Saa.’

b sàà wá ní
 Saa was FOC
 ‘It was Saa.’

Wa is a full verb in Kisi (Childs 1995:119). It may be inflected (although, it should be noted, only for imperative and hortative) and allows certain extensions to be added, such as the benefactive: **wa** ‘be’ > **wèlló** ‘be for someone’. **Co** is far more restricted in its distribution and productivity, being used “only when the sense is both realis and present” (1995:120).

16.5.2 “Incipient” auxiliary verbs

Childs acknowledges the diachronic nature of grammaticalisation processes by identifying several lexical items as “incipient auxiliary verbs” (1995:120). He notes that these items occur in the same position as do the auxiliary verbs **wa** and **co**. Among the verbs that fall under Child’s “incipient auxiliary” designation include:

(33) **cii** ‘finish’

ò cii fòndàndàḡ hèwì
 3s finish spaces occupy
 ‘He occupied the spaces.’ (1995:121)

(34) **nɔɔ** ‘have’ (modal AUX expressing obligation)

tààniláḡ ndân lá n wàná súí cùwó ní
 bonds these Prohave people palaver bring FOC
 ‘It is these commitments that cause trouble between people.’ (1995:121)

(35) **hiou** ‘pass by’ (‘continuative’)

sàà cúá léḡndó yááù mbó hiàù kláḡ
 Saa grab machete Idph Conj-he pass going
 ‘Saa grabbed the cutlass and continued on.’ (1995:121)

This lexical item is also used in comparative structures:

(36) ò hiòù yá nàḡ
 3s pass me goodness
 ‘She’s more handsome than I.’ (1995:20).

(37) **huḡ** ‘come’ (‘incipient’)

ò cò hùn cíóóḡ tòòfià
 3s Aux come towns look-at
 ‘He will come inspect the towns.’ (1995:121)

16.6 Relatives

A relative clause follows the noun it modifies. The relativized noun loses its noun class suffix, which is replaced by the noun class pronoun, with the noun class suffix appearing at the end of the clause. Thus, as in the following example, two pronouns appear in the sentence, one immediately after the modified noun ('water') and another before the predicate ('(be) good'). The first **mà** replaces the suffix **áj**, which appears at the end of the relative clause, and the second is the subject pronoun:

- (38) a noun 'water' **mèŋ-mà** (ma class)
- mèŋ** **mà** [ó kól]-**áj** **mà** **nǐŋ** **lé**
 water Pro [he drink]-Suf Pro good NEG
 'The water [that he drank] wasn't good.' (1995:286)

The situation is slightly different with **o**-class nouns. Here, no pronoun appears after the modified noun:

- b noun 'person' **wàná** (o class)
- wàná** Ø [tóófià cíóŋ]-ó ò cò **lè** **hùndò**
 person Pro [inspect towns]-Rel Pro AUX again come
 'The person [who inspects towns] will return.'

16.7 Negation

Kisi has but one negator: the post-posed independent particle **lé**.

- (39) **í kóó sà** vs. **í kóó sá lé**
 'I pass judgement.' 'I don't pass judgment.' (1995:261)

Some irregular verbs show vowel changes in the negative:

- (40) **kíól** vs. **kíàl lé**
 'Bite!' 'Don't bite!' (1995:221)

In copular constructions, it is the noun which is negated. When this occurs, "the noun loses its suffix and prefixes its pronoun" (Childs 1995:261), as in (41a and 42). The high tone of the copula raises the first tone of the stem, if it is low (as in 41b):

- (41) a noun **càléŋ** 'pumpkin' (**le** class)
- ò** **có** **lé-cá** **lé**
 it Cop Pro-pumpkin NEG
 'It's not a pumpkin.'

b noun **cáá** ‘maggots’ (a class)

ò có á-cáá lé
 it Cop Pro-maggots NEG
 ‘It’s not maggots.’

Childs (1995:263) notes that there is a certain amount of “pragmatic complementarity” of negative and focus particles: “Negation has inherent focus and thus there is no need for further focus”:

(42) **tànd-ǎŋ ní** vs. **ò có má tándà lé**
 pubic.hair-Suf FOC it Cop Pro pubic.hair NEG
 ‘It’s pubic hair.’ ‘It’s not pubic hair.’

16.8 Overview of Kisi Verbal Forms

Stem	cimbu	‘leave’
Imperative	címbú	‘Leave!’
Hortative	ò cìmbú	‘She ought to leave.’
Habitual	ò cìmbù	‘She (usually) leaves.’
Past Habitual	óó cìmbù	‘She used to leave.’
Perfective	ò cìmbú	‘She left.’
“Perfect”	ò cìmbú níŋ	‘She has now left’
Future	ò cò cìmbù	‘She will leave.’
Present Progressive	ò cò cìmbòó	‘She is leaving.’
Future Progressive	ò cò wà cìmbòó	‘She will be leaving.’
Past Progressive	ò wà cìmbòó	‘She was leaving.’

17

Makaa

(Narrow Bantu, Bantoid)

John Hewson

17.1 General

Makaa is a northwestern Bantu language, identified by Guthrie (1971:33) as A83, and has some 80,000 speakers in the southeastern area of Cameroon. It has maintained a robust system of noun classifiers, with prefixes that have typical Bantu cognates. The tense/aspect system, which is similar to that of many other Bantu languages, was described by Daniel Heath in 1991, and a sketch of the language was published by Theresa Heath in 2003. Examples below come from both sources. This Bantu language is included here since it exemplifies a set of northwestern Bantu languages which differ significantly, especially in their analytic verbal morphology, from most other Bantu languages.

The dialect described by the Heaths has nine oral vowels (four front /i, ɪ, e, ɛ/, three central /ɨ, ə, ɑ/, two back /u, o/ and two nasalized vowels /ẽ, õ/. (The Heaths use different transcription systems for central vowels). Length is distinctive and there are two distinctive tones (H, L); floating H (acute accent) and L (grave accent) are part of the analysis; surface tones include rising (marked by a hachek), falling (marked by a circumflex), and downstepped H (marked by a superscript exclamation point).¹

17.2 Word Order

Word order is S V O Other as in (1). Any argument of the verb may be left-dislocated for topicalization.

- (1) **mù-ùd** **á** **nyé** **´** **wíng** **ò-mpyê**
 cl1-person P₂ he H₁ chase.away cl2-dog
 ‘The person chased away the dogs (before yesterday).’

17.3 Verb Structure

The complicated structure of the Makaa verb is shown in (2) and exemplified in (3). The verbal complex has three parts: (i) a subject marker with a following tense marker, and a verb complex that begins and ends with a high tone, and is divided into (ii) a set of independent pre-stem morphemes, and (iii) a stem consisting of a root with prefixed OM and suffixed extension and final vowel. The high tone at the beginning of the verb complex is a replacive/floating tone, realised on the preceding or following syllable (depending on tonal context). The Near Past (P₁) marker follows this H and is in turn

¹ Abbreviations used in this chapter: CM= ‘clause marker’, VC= ‘verbal complex’, MacH = the term the Heaths use for the tonal delineation of parts of the verbal complex.

followed by a variety of clause markers which precede the Habitual and Progressive aspect markers, a variety of temporal adverbial elements, the object marker, and the main verb. Following this are the extensions, the Final Vowel, and a second high tone which displaces its tone to the right, onto any following constituent.

(2) [SM TM] [H₁ P₁ NEG=CM HAB PRG ADV/AUX [OM-root-EXT-FV] H₂]

The pre-stem structure of the verb is analytic, so that instead of listing the verbal elements as word formatives, they are listed in (2) as ordered parts of the verbal complex (VC), the main formatives of the verb being analysed as separate elements with the following basic order (aspects follow the clause marker, and allow the combination of HAB with PRG). Theresa Heath makes the following observations on the status of different elements: The pre-root morphemes (clause marker, aspect markers, adverbials, and auxiliaries) are more loosely linked to the verb radical, because they can have both a H and an inflectional clitic (negative, hortative, imperative) separating them from the verb. “Neither the H nor a clitic can separate the post-root verbal extensions from the verb radical. Therefore, the pre-root morphemes are free forms, having the same syllable structures as other words, while post-root verbal extensions are bound forms, usually a suffix consisting of a continuant (**l, y, w, sh, or s**) and a vowel” (2003:243).

The two floating high tones (H₁ and H₂) appear to have a significance for the ordering of the verbal piece, H₁ apparently indicates the relationship of the initial unit [subject marker + tense] to the main stem with all its parts, and H₂ likewise indicates the relationship of the whole verbal piece to a following nominal direct object or other verbal complement. In short, the two high tones delineate the elements of verb structure. The fact that H₂ is not used with P₂ or with the Present Progressive, however, as in the examples which follow (and in (6)) remains a problem that has no obvious explanation.

Morphemes occurring in the positions illustrated in (2) are listed below and exemplified in examples (4)-(8):

SM: 1s **mè**, 2s **wò**, 3s **nyè**, 1p (excl) **sè**, 1p (incl) **shé**, 1(dual) **shwé**, 2p **bí**, 3p **bwó**

TM: (Ignores associated tones, see 17.4, below). **ámè** P₁, **a** P₂, Ø present, **e** F₁, **bá** F₂

NEG: **a´** (non-past)

CM: **shí** (“polar focus”), **ká**, **mú**. There are others not listed here.

HAB: **dè**

PRG: **ngè**

ADV/AUX: **ná** ‘still/not yet’, **ɲwá** ‘almost’, **lèèl** ‘quickly’, **zè** ‘inceptive’ (from a verb meaning ‘come’), **kè** ‘terminative’ (from a verb meaning ‘go’), **bwèy** ‘long ago’ (from a verb meaning ‘take a long time’).

OM: 1s **mè**, 2s **wò**, 3s **è**. The object markers are limited in usage. They occur in some dialects only when the object is a Class 1 noun. Otherwise, the object is simply a pronoun or a noun following the verb.

EXT: Passive **-òw-**, Reflexive/Reciprocal **-lò-** / **-yò-**, Causative **-òl-** or vowel change **o > e**, Resultative **-ya-**.

FV: A very limited set: **-ε** (NEG), **-á** (plural IMP) **-i** (singular Imperative) (see example (11)).

(3) Examples:

	[1s TM]	[H ₁	P ₁	NEG	HAB	PRG	ROOT-EXT-FV	H ₂]	OBJ
PRS									
HAB/PRG	mè				dù	ngè	wíng		ò-mpyê
	'I am always chasing the dogs.'								
P₂									
HAB/PRG	mè	a			dù	ngè	wíng		ò-mpyê
	'I was always chasing the dogs.' (before yesterday)								
P₁									
HAB/PRG	mè		ámè		dù	ngè	wíng		ò-mpyê
	'I was continually chasing the dogs.' (yesterday)								
NEG	mè	a		cal-			é		méléndú
	mè àcálé méléndú 'I do not cut down palm trees.'								

17.4 Tenses and aspects

There are five tenses, four of which are marked, and one unmarked, indicating a common Bantu division between a Vast Present (unmarked), and subsequent representation, at a secondary level, of time divided into a contrastive set of tenses: Far Past (P₂), Near Past (P₁), Near Future (F₁), and Far Future (F₂). In most situations the Far Past (P₂) refers to situations earlier than the morning of the previous day, the Near Past (P₁) to hodiernal or hesternal situations, the Present to general, current, or immediate future situations, the Near Future (F₁) to hodiernal situations, and the Distant Future (F₂) to situations after today. The different contrasts of tense and aspect, and the different levels of tense are illustrated in the diagram in §17.7 below, and the combinations of tense and aspect are illustrated by the grid in example (7). The aspectual contrasts are found with all of the tensed forms of the verb.

17.4.1 Tense Morphology

The following table of indicative tense forms is based on Theresa Heath (2003:344). The floating tone H₁ docks its high tone to the right if the tone to the right is high; if low, H₁ docks its tone to the left. These floating Hs are consequently only distinctive if both left and right tones are low.

(4) The five tenses of Makaa (based on T. Heath 2003:344)

TENSE	TM	VC		
Far Past (P ₂),	a +	H ₁	VC	∅
Near Past (P ₁),	H ₁ +	ámè	VC	H ₂
Present	H ₁ +	∅	VC	H ₂
Near Future (F ₁),	e +	H ₁	VC	H ₂
Far Future (F ₂)	bá +	H ₁	VC	H ₂

The details of this scheme are not entirely clear. From the data it appears that **bá** + H₁ should be parallel to P₂ and F₁, but according to the data given by Daniel Heath (see (7) below) it is followed by H₁. There is in fact no way of telling, since it has an underlying high tone. There is also a H₁ before **ámè** which docks to the left in spite of the initial high tone on **ámè**; consequently in Daniel Heath's data a floating low is inserted before this formative to justify the left docking. It is clear, nevertheless, that P₁ is both morphologically and positionally different from the other tense markers (and appears to have been bi-morphemic). The five tenses are exemplified below (the arrow (→) indicates the resultant surface forms):

(5) a Vast Present

mè ' wííng ' ò-mpyá → **mè** wííng ómpyè
 1s H₁ chase H₂ cl2-dog
 'I am about to chase the dogs away.'

b Far Past

mè **a** ' wííng ' ò-mpyè → **mé** **a** wííng ómpyè
 1s P₂ H₁ chase H₂ cl2-dog
 'I chased the dogs away (before yesterday).'

c Near Past

mè ' **ámè** wííng ' ò-mpyá → **mé** **ámè** wííng ómpyá
 1s H₁ P₁ chase H₂ cl2-dog
 'I chased the dogs away (yesterday or today).'

d Near Future

mè e wííng ò-mpyá → **mé e wííng ómpyá**
1s F₁ H₁ chase H₂ cl2-dog
'I will chase the dogs away (later today).'

e Far Future

mè bá wííng ò-mpyá → **mè bá wííng ómpyá**
1s F₂ H₁ chase H₂ cl2-dog
'I will chase the dogs away (tomorrow or later).'

17.4.2 Aspect markers

There are four aspects, exemplified in (6a-d) below, of which one is unmarked and probably Performative (called Perfective by the Heaths, using the older undifferentiated terminology). The three marked aspects are Habitual, Progressive, and Retrospective (Perfect); the Habitual may be the typical generic Imperfective of the Vast Present, as seen elsewhere throughout Niger-Congo. These are all illustrated by examples of the Present tense in (6a-d). The Perfect is marked by **mé** ` , and the floating L causes a following H to be down-stepped as in (5d):

(6) The four aspects of Makaa

a Present Perfective (= Performative)

mè wííng ò-mpyâ → **mè wííng ómpyâ**
1s H₁ chase H₂ cl2-dog
'I am about to chase the dogs away.'

mè à- càl-é mè-lóndú → **mè àcálé mè-lóndú**
I NEG cut-NEG H₂ cl6-palm tree
'I do not cut down palm trees.'

b Present Habitual (Imperfective?)

mè dè wííng ò-mpyá → **mé dè wííng ómpyá**
1s H₁ HAB chase H₂ cl2-dog
'I (regularly) chase dogs away.'

c Present Progressive

mè ngè wííng ò-mpyá → **mè ngè wííng ómpyá**
1s H₁ PRG chase H₂ cl2-dog
'I am chasing the dogs away.'

d Present Perfect

mè mé ' wííng ' ò-mpyá → **mè mé**! wííng ómpyá
 1s PFT L chase H₂ cl2-dog
 'I have chased the dogs away (and they haven't returned).'

The so-called Perfective that is used in 6b, with an habitual sense ("It is not my habit to cut down palm trees") is clearly a Performative, as it is in the English translation. Perfectives are only used of events that are complete in time: the typical Perfective is a marked form that represents a completed event.

17.4.3 Complete array of tense and aspect forms

We are now in a position to present a grid showing the various combinations of tense and aspect, as prepared by D. Heath for his original presentation (1991:14). The Perfect has been left out of this grid.

(7) Tenses and Aspects in Makaa

	1s	P ₂	H ₁	P ₁	HAB	PRG	STEM H ₂	O
PRES								
PFM	mè						wííng	òmpyá
PRG	mè					ngè	wííng	òmpyá
HAB	mè				dù		wííng	òmpyá
HAB/PRG	mè				dù	ngè	wííng	òmpyá
P₂								
PFM	mè	a					wííng	òmpyá
PRG	mè	a				ngè	wííng	òmpyá
HAB	mè	a			dù		wííng	òmpyá
HAB/PRG	mè	a			dù	ngè	wííng	òmpyá
P₁								
PFM	mè			ámè			wííng	òmpyá
PRG	mè			ámè		ngè	wííng	òmpyá
HAB	mè			ámè	dù		wííng	òmpyá
HAB/PRG	mè			ámè	dù	ngè	wííng	òmpyá
F₁								
PFM	mè	e					wííng	òmpyá
PRG	mè	e				ngè	wííng	òmpyá
HAB	mè	e			dù		wííng	òmpyá
HAB/PRG	mè	e			dù	ngè	wííng	òmpyá

F₂						
PFM	mè	bà			wííng	òmpyê
PRG	mè	bà		ngè	wííng	òmpyê
HAB	mè	bà	dɛ̀		wííng	òmpyê
HAB/PRG	mè	bà	dɛ̀	ngè	wííng	òmpyê

17.5 Other categories

17.5.1 Mood

There are three moods, Indicative, Subjunctive, and Imperative, the Indicative being the unmarked or default form. Subjunctive and Imperative are both marked by high tone and a suffixed **-g**, as in (8) and (9) with the verb **càl** ‘cut’.

(8) wò **càlígí mǎléndú** ‘You should cut down palm trees!’

(9) **càlígí mǎléndú** ‘Cut down palm trees!’

The Subjunctive is marked by a high tone that replaces the first tone of the verb complex. The Subjunctive also differs from the Imperative by having a subject pronoun.

17.5.2 Focus

Any argument of the verb may be left-dislocated for topicalization. A fronted pronoun takes a contrastive suffix. Non-verbal clauses that use the focus **ó** instead of the regular copula are cleft constructions:

(10) **jínó dám ó Mpa** (high on first four vowels)
 name my FOC Mpa
 ‘It is my name that is Mpa.’

17.5.3 Imperative

Heath (2003:345) gives three examples:

(11) **cal-íng** (H on last vowel) ‘Cut down (s)!’
cal-i-g-í mǎléndú (H on last four vowels) ‘Cut down (s) palm trees!’
cal-íng-á mǎléndú (H on vowels, 3, 5, 6) ‘Cut down (p) palm trees!’

Thus, Imperatives have the suffix **-Vg** and a high tone on the final vowel of the verb complex. As can be seen, singular and plural Imperatives have different final vowels.

17.5.4 Relativization

“Relative clauses are marked with a high tone on the conjunction or in the verb, as are other subordinate clauses. Relative clauses are post-nominal. The head of the clause can

be a noun or the pronoun **-ang** with concord. Tonally the relative clause is marked by a high tone that replaces the high one of the subject NP and another high tone that replaces the tone of the first morpheme of the verb string, a relative marker agreeing with the head noun occurs at the end of the clause. example (Heath 2003:347):

- (12) **mè cɛɛl b-ang bwó dǐ ʼ bul ʼ sɛy wá**
 1s want cl2-those 3p HAB MacH lot MacH work REL.cl2
 ‘I like those who work hard.’

17.6 Negation

Data on negation in the sources are limited. There appears to be a binary negative contrast between Indicative and Subjunctive/Imperative. According to Theresa Heath (2003:345): “Negation in the indicative is marked by both a pre-stem clitic and a suffix in the position of Final Vowel. The clitic (toneless **a** + H + suffix **ɛ** or **ɛ**) varies somewhat from tense to tense”, attaching itself to **shí** in past tenses, and with tonal adjustments elsewhere. She gives the following example (2003:346):

- (13) **mɛ a- cal ɛ ʼ mɛ-lɛndu > mè àcalé méléndú**
 L L L H H L H H
 I NEG cut + NEG MacH cl6-palm tree
 ‘I do not cut down palm trees.’

In the Subjunctive and Imperative, which have volitional intent, negation is expressed by **kú** + L, and this low tone causes downstep of a following high, as in (14).

- (14) **ku ʼ wiing ʼ o-mpye > kú ʼwiing ómpyɔ**
 H L HH H L-HL
 NEG chase MacH cl2-dog
 ‘Do not chase the dogs!’

However, while most examples do support this two-way contrast, a few suggest that negation may not be quite so simple. Consider these two sentences:

- (15) **mè dǐ mè jáámb > mɛ dǐ mɛ jáámb**
 1s NEG.FOC 1s cook
 ‘It’s not me that cooks.’

- (16) **mè kú ɛ nyingo ɛ ngo wáámbile ifambe**
 1s NEG.SBJ MacH again MacH PRG clear field
 ‘I am not clearing the fields again.’

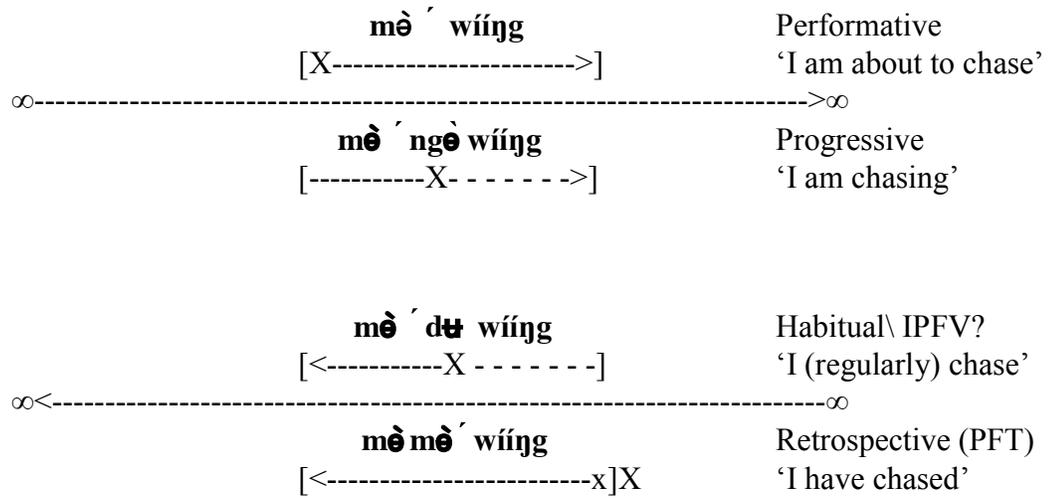
The **dǐ** in (15) might be interpreted as a negative copula or focus marker. Heath labels the **kú** in (16) as a Negative Subjunctive, but it is not obvious to us how or why that sentence contains a Subjunctive.

17.7 Diagram of the tense-aspect system

(All forms have 1st person subject pronoun **mè**)

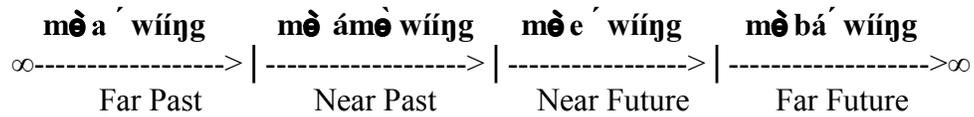
Stage 1

Vast Present



Stage 2

Tense contrasts



18

Obolo

(Lower Cross, Delta Cross, Cross River)

Derek Nurse

18.1 General

Some 100,000 people speak varieties of Obolo in a group of more than twenty islands in the extreme southeast corner of the Niger Delta in SE Nigeria, facing the Atlantic Ocean. Obolo refers to the language, the people, and their homeland. The government name is Andoni. Obolo is closely related to better known Lower Cross languages such as Ibibio and Efik. Until recently many Obolo spoke Igbo and Ibibio as second languages. The younger generation speaks Nigerian Pidgin English and/or Nigerian Standard English beside Obolo. Our analysis relies entirely on Faraclas (1984, 122 pages).

Obolo distinguishes an extra high (circumflex accent), a high (acute accent), and a low tone (unmarked)¹. The tonal shape of some verb forms is the sum of the tones of the SM, any AM marker, and the tone of the root, but in many forms there is a superimposed tonal shape so that the tonal contour is not the sum of the tones of individual morphemes. Tone is very important in verbal distinctions. Also, “Obolo utterances are divided into stress groups and each such group receives one stress. Stress groups are usually centered around a verb [...] Stress is normally marked by an extra high or a gliding tone”.

The central role of tone in the verb system can be illustrated by considering the structure **o-tele** (2s-leave). It occurs in several different surface tonal shapes, e.g. **ó-télé** ‘you leave/left’, **íkpa ó-télé** ‘letters that you left’, **o-téle íkpá** ‘you left the letters’. We do not attempt below to describe tone patterns fully.

The Obolo consonant system is unexceptional for the area: it has only two fricatives (/f, s/) and lacks any /p/. There are six vowel qualities, (/i, e, a, ɔ, o, u/). All occur short and long, the long ones being relatively rare and tending to shorten in many contexts. Syllables in Obolo can have these structures only: V, N (only in prefixes), CV, CVC, CV:C, CGV, CGVC.

18.2 Word order

Obolo is predominantly S V O Other. O has the order DO V² IO, where either or both parts can be nominal or pronominal. DO, IO, and adverbials can be fronted for emphasis. Questions can be fronted (relativised) or not:

¹ Faraclas says each of the three has two major allotones: for the extra high, a level extra high tone or a fall from extra high to high; for the high, a level high or a fall from high to low; and for the low, a level low or a rise from low to high. The contexts for these allotones are not given so we simply refer to the three tones as extra high, high, and low.

² O has the order DO IO, where DO and IO have to be separated by a verb, often ‘give’, so a construction with V DO IO is like a serial verb construction: **↑-ge íkpá ínyí emi iyákwut** ‘He wrote the letter to me yesterday.’ lit. ‘He write letter give me yesterday’.

- (1) a **i-gé³ kêké**
 3s-write what
 ‘What did 3s write?’
- b **kêké ké î-gé**
 what that 3s-write
 ‘What did 3s write?’

We did not find examples where use of an auxiliary led to inversion of V O.

18.3 Verb structure

The canonical verb structure is: M - SM - NEG - AM – root.

M: **mâ-** “Weak future”. A preverbal **#ke#** does or may occur before subjunctive forms.

SM: 1s **N-**, 2s **o-**, 3s is **i-** in most contexts but **o-** in contexts including subjunctive and preverbal focus. The most common SM for 1/2/3p is **e-** (most often H-or extra-H-toned). Other plural SM markers are **mi-**, **i-**, and **me-**, each occurring in a limited range of contexts. Since plural SMs are neutral for person, they have to be preceded by an independent 1/2/3p pronoun.

NEG: the plural NEG /kpe/ always occurs verb-initially, preceded by an independent pronoun, not an SM. The other negative formatives occur after the SM (see §6).

AM: **Ø** FAC; **-ki-** IPFV (always high- or extra-high-toned); **-ké-kí⁴** HAB; **-gâ(-kî)-** or **-mê(-kî)-** PRG; **-ke-bí-** PRESSIMUL⁵; **-ba-** “strong future”, conditional; **-ba-kí-** “strong future” IPFV; **-ba-** or **-ri-**, optionally followed by **-bé-** or **-ré-**, followed by infinitival **í-** PFT.

As can be seen, the AM position can be filled by zero, one, two, or, exceptionally, three⁶ morphemes in a string. Most markers with two (or three) syllables are visibly sequences of single morphemes. IPFV **-kí-** comes last in a sequence.

Root: verb roots have these shapes: CV, CVC, CGV, CV:C, CVCV. The commonest type CV, and CGV are always H-toned, whereas the other types can be H or L. In CVCV verbs, the vowel of the second syllable is that of the first. The few three syllable verbs involve reduplication.

Productive root reduplication reduplicates the initial consonant and the initial vowel, /i, u/ of the root lowering to /e, o/. For the function of reduplication, see §5.3, below. With the possible exception of **-na**, only occurring on monosyllables, Obolo verbs do not have suffixal extensions.

³ In all examples we follow Faraclas in using four verbs, shown with their basic/lexical tone: **-gé** ‘write’ and **-télé** ‘leave’, **-fuk** ‘read/count’ and **-bokó** ‘receive!’.

⁴Faraclas regards **ké-kí** as reduplication of **-kí-**, with accompanying lowering of [i].

⁵Abbreviation PRESSIMUL is used in this chapter for Faraclas’ “present simultaneous”, an apparently subordinate form, explained and exemplified below (§18.4).

⁶The one three-morpheme combination is an alternative Progressive form, omitted here.

18.4 Aspect, mood

Faraclas shows a total of forty-two positive forms contrasting indicative, subjunctive, aspect, modal futures, focus, and imperative. Six of these are regional or are variants (often short), reducing the total to thirty-six.

He distinguishes two basic aspects, completive and continuative, and several tenses: “present”, “present simultaneous”, three “futures” (weak, strong, very strong), and “past anterior”. Following the general practice in this book we accept completive and continuative as (the basic) aspects but re-label them as Factative (FAC) and imperfective (IPFV), respectively. FAC is the unmarked member; IPFV is marked by adding **kí** and changing the tone pattern. Faraclas shows all forms as basically FAC or IPFV, plus their other categories. This includes subjunctive and imperative (seen §18.5, below), which are Factative, but can be made imperfective.

- (2) a **ń-ge** **íkpa**
1s-write letter
‘I write/wrote a letter’⁷ (FAC)
- b **n-kí-ge** **íkpa**
1s-IPFV-write letter
‘I am/was writing a letter’ (IPFV)

We reinterpret his “tenses” as aspects or modals. This reinterpretation has to be tentative because forms are described and illustrated briefly – in line with his intent “to provide an adequate, though by no means exhaustive, description of the grammatical structures of the languages” (p. vii) – and there is no body of texts that would enable us to more fully explore the functions of the “tenses”.

We interpret his “futures” as modal forms rather than future tenses (and thus gloss these morphemes as M). This is because their primary function is not simply reference to future time but a combination of time reference with a strong modal component. Thus he says of the “weak future” patterns that they “often express desire or speculation about the future, rather than what will actually come to pass”, and translates them by “will” or “want to”. The “weak future” is also shown in sentences translated by English conditionals. The “weak future” is encoded by a morpheme /ma/ at the verb-initial M slot, where it combines with following SMs like this: 1s **mâ-**, 2s and 3s **mô-**, plural **mê-**. The **ma** that occurs in the “weak future” derives from the independent verb **-má** ‘like, love’.

He talks of the “strong future” in two ways: 1. “used to express actions or states of being that the speaker is sure will occur in the future”, and 2. “conveys a very strong sense of obligation to realize an action or state of being in the future”. It is represented by the morpheme /-ba-/, which shows the same range of vowels as the “weak future”. Examples of “weak futures” (3a-e), “strong futures”, (3f-g)”, both in (3h):

⁷We follow Faraclas’ glosses. It should be noted that he varies between singular and plural glosses for nouns, and between English present and past glosses for verbs.

- (3) a **mâ-gé** **íkpá**
1s.M-write letter
'I will (want to) write a letter.'
- b **owu mô-tele íkpá**
2s 2s.M-leave letter
'You will leave a letter.'
- c **omô mô-fuk íkpá** '3s will read a letter.'
- d **eji mê-bòkò íkpá** 'We will receive a letter.'
- e **ke má-gégê íkpá**
ke 1s.M-write letter
'I should (could, will) have written a letter.'
- f **m-bâ-ge íkpá** 'I will write a letter (it's a sure thing).'
- g **m-bâ-gê íkpá** 'I will write a letter, I will have to write a letter.'
- h **mé mgbo mâ-bâ-ge íkpá omô mó-nu**
by time 1s.M-M-write letter, 3s 3s.M-come
'By the time I will begin to write a letter, he will have come.'

Despite our interpretation of his futures as modals we will continue to refer to them as the “weak” and “strong” futures. We interpret his “present tense”, “present (simultaneous) tense”, “past anterior tense” as aspects: progressive, progressive (subordinate), and perfect, respectively. The “present” can hardly be a present as it translates as both present and past, so on the evidence of the one sentence available we see it as a progressive:

- (4) **owu o-ga-ki-télé íkpá** 'You are leaving a letter', or 'You were leaving ...when..'

The “present (simultaneous)” can likewise refer to past or present situations but has an additional component which, judging from Faraclas' few examples, appears to be a dependent status: it appears only in subordinate clauses, and indicates an action ongoing at the same time as the main verb. (These are the only examples):

- (5) a **ń-ke-bí-gé íkpá, n-kâ-gwén owu**
1s-PRESSIMUL-write letter, 1s-NEG-call you
'As I am writing a letter, I didn't call you.'
- b **owu ó-ke-bí-télé íkpá, n-kâ-gwén owu**
2s 2s-PRESSIMUL-leave letter, 1s-NEG-call you
'As you were leaving a letter, I didn't call you.'

- c **íkpa é-ké-bí-bòkó míwá** ‘The letters that we are receiving are many.’

There also appears to be what is best described an habitual, illustrated but not formally recognized by Faraclas:

- (6) **n-kê-kí-gé íkpá** ‘I am/was always writing letters, used to write letters.’

Finally, although Faraclas has a tense called “past anterior”, the four examples given are translated by the English perfect, which inclines us to regard this as perfect (aspect):

- (7) a **ń-ra-í-gé íkpá** ‘I have written a letter (already).’
 b **owu ó-ba-í-télé íkpá** ‘You have left a letter.’
 c **î-ra-bí-fuk íkpá** ‘3s has read a letter.’
 d **ji mâ-ba-bí-bòkó íkpá** ‘We have received a letter.’

It is possible that eastern varieties of Obolo have a real past tense. Faraclas gives a number of eastern examples that involve **ka** (variants **ko, ke**) and are translated by English pasts, not perfects (p.78):

- (8) a **ń-kâ-gé íkpá** ‘I wrote a letter.’ (cf (2), above)
 b **ogwú o-kô-ge íkpá** ‘Person who wrote books...’ (cf (16), below)
 c **íkpa n-kâ-ki-gé..** ‘Letter that I was writing...’ (cf (16), below)

In summary, we see Obolo as a language with aspects and moods, but no tense contrasts. Thus it has a basic FAC : IPFV distinction, plus two modal “futures”, two progressives (one used in main clause, one in subordinate), an habitual, and a perfect. There is (possibly), a conditional (see §18.5.5).

18.5 Other categories

18.5.1 Imperative

Singular imperatives are morphologically unmarked and have their root tone (except if said in isolation, where stress intervenes to produce an extra high tone). Plural imperatives add the plural prefix **i-**. The negative formative is **-ka-**, and the root takes a H. The basic imperative is Factative but can be made imperfective in the usual way, by adding **kí**.

(9)	FAC	NEG	IPFV	NEG
Singular	gé íkpá 'Write a letter!'	ka-gé íkpá	kí-gé íkpá 'Be writing a letter!'	ka-kí-gé íkpá
Plural	i-fuk íkpá 'Read a letter!'	í-ka-fúk íkpá	i-ki-fúk íkpá 'Be reading letters'! ⁸	í-ka-kí-fúk íkpá

18.5.2 Subjunctive

Subjunctives, focus forms, and relativized verbs mainly differ tonally from corresponding indicative, neutral focus, and absolutive forms, respectively⁹. The tone differences affect SMs and/or stems, the latter having a consistent high-low surface pattern in the subjunctive. The “relative conjunction” **ke** may also occur before a “subjunctive”, in which case the tones are sometimes not those typical of the subjunctive. Examples:

(10) Indicative **í-fuk íkpá** ‘He reads/read a letter.’

Subjunctive **mô-ro omô fúk íkpá**
 3s.M-make 3s 3s-read.SBJ letter
 ‘He will make him read a letter.’

SBJ + verb focus **mô-ro omô í-fófúk íkpá** ‘He will make him read a letter.’

SBJ + IPFV **mô-ro omô í-kí-fúk íkpá**
 3s.M-make 3s 3s-IPFV-read.SBJ letter
 ‘He will make him to be reading...’

but **ń-ge íkpá** ‘I write/wrote a letter’, and **ke ń-ge íkpá** ‘I should have written a letter’¹⁰

18.5.3 Focus

Verbs may be focus neutral, that is, no particular part of the utterance is emphasized, as in the pair in (2), repeated here as (11):

(11) a. **ń-ge íkpá** ‘I write/wrote a letter.’ (FAC)

b. **n-kí-ge íkpá** ‘I am/was writing a letter.’ (IPFV)

Verbs may also have “prefocus, postfocus, verb focus, or auxiliary = aspect focus”. The differences are mainly tonal: a few cases may involve the use of pronouns: verb focus also involves reduplicating the initial consonant and vowel of the root: and aspect focus may also reduplicate what Faraclas calls the auxiliary, which we label AM

⁸Faraclas translates this and its negative equivalent with “letters”, not “a letter”.

⁹The 3s has **i-**, for indicative **o-**.

¹⁰Faraclas labels this as “subjunctive”, but his reason is not clear.

(Aspect-Mood). Pre- may not co-occur with post-focus, nor verb with aspect focus, but prefocus or postfocus may co-occur with verb or aspect focus.

Prefocus “puts emphasis on elements occurring in the same sentence, but preceding the verb”. Faraclas’ prefocus examples put emphasis on the subject or are relative clauses where the nominal object precedes the verb. Prefocus is usually marked by emphasis, resulting in a high or extra-high tone, on the SM. When the subject is emphasized, an independent pronoun is often used as well¹¹. Examples, with emphasis underlined:

- (12) a **owu ó-kí-télé íkpá**
 2s 2s-IPFV-leave letter
 ‘You were leaving a letter.’
- b **íkpá (bé) o-télé míwá**
 letters (REL) 2s-leave many
 ‘The letters (that) you left are many.’

Postfocus puts emphasis on elements following the verb in the same sentence. Faraclas’ examples put emphasis on the object or the complement in relative clauses whose nominal subject precedes the verb. The tonal patterns of postfocus forms differ from those in focus neutral forms but the details are not clear to us. Examples:

- (13) a **n-gê íkpá iyákwut**
 1s-write letter yesterday
 ‘I wrote the letter yesterday.’, or ‘I wrote the letter yesterday.’
- b **ogwú o-gê íkpá** ‘Person who writes books...’

Verb focus is marked in all cases by reduplicating the verb stem. Whether verb focus forms share tonal properties is unclear to us. Examples:

- (14) a **n-gêge íkpá** ‘I wrote a letter.’
- b **íkpá í-fofuk i-kâ-má** ‘The letter he read he didn’t like.’
- c **i-bóbo íkpá** ‘Receive the letter!’

Auxiliary/aspect focus most often has a compound or double morpheme at AM. Sometimes this involves reduplication, in other cases an apparent sequence of morphemes. Faraclas regards the “strong future” as [+ auxiliary focus]. Examples:

- (15) a. **n-kê-kí-gé íkpá** ‘I am/was always writing letters’ (HAB, reduplicated **kí**)
- b. **n-gâ-kí-gé íkpá** ‘I am writing a letter’ (PRG)

¹¹ In this case the 3s SM is o-, not i-.

- c. **m-bâ-ge íkpá** ‘I will write a letter’ (stronger than **mâ-gé íkpá**)

18.5.4 Relatives

Relative clauses are have three formal characteristics: 1. they differ tonally from absolutes, 2. they have different SMs in some cases from those in absolutes, and 3. they optionally involve the use of “relative conjunctions” (such as **ké**, **bé**) or demonstratives pronouns (such as **eyí**). We ignore 3. in the display in (16). (16) presents examples of absolutes (2nd column), object relatives (where the head noun and the object of the relative clause have the same referent: 3rd column), and subject relatives (where head noun and subject of the relative clause have the same referent: 4th column).

(16) Relatives

	Absolute	Object relative	Subject relative
Factative Neutral focus	î-fuk íkpá ‘3s-reads/read letter.’ î-gé íkpá ‘I-write/wrote letter.’	Íkpá î-fuk ‘letter 3s-read’ íkpá î-gé ‘letter I-wrote’	ogwú o-gê íkpá ‘person who-writes letters’
Factative Verb focus	n-gêge íkpá ‘I- <u>wrote</u> letter.’ i-fôfuk íkpá ‘3s- <u>read</u> letter.’	Íkpá î-fofuk ‘book 3s- <u>read</u> ’	ogwú o-gêge íkpá ‘person who- <u>writes</u> letters’
Imperfective Neutral focus	n-kí-ge íkpá ‘I am/was writing letter.’ i-kí-fuk íkpá ‘3s is/was reading letter.’	Íkpá î-kí-gé ‘letters I was writing’ íkpá î-kí-fuk ‘letters 3s was reading’	ogwú o-kí-ge íkpá ‘person who-is/was- writing letter’
“Weak future”	mâ-gé íkpá ‘I.will-write letter.’ omŏ mô-fuk íkpá ‘3s.will-read letter.’	Íkpá mâ-gê ‘letters I.will-write’	
“Strong future”	m-bâ-ge íkpá ‘I-will-write letter.’ i-bô-fuk íkpá ‘I-will-read letter.’	Íkpá î-ba-ge ‘letters I-will-write’ íkpá î-bo-fuk ‘letters 3s-will-read’	

It is not easy to generalize about the tonal patterns in (16), partly because in any row or column several factors are at play (focus, aspect, person, etc), partly because the tones shown above, taken from Faraclas’ paradigms, sometimes differ from the same or similar forms shown elsewhere in his text in a sentence context, partly because the tonal generalizations he himself makes, while mostly accurate, do not always seem to correspond to the forms he shows.

Nevertheless, starting from the assumption that the absolute column represents a relatively unmarked set of forms, it seems to be true that: what characterizes the object

relative is an extra high or an additional high tone, mostly on the SM, occasionally displaced on to the first stem syllable; what characterizes the subject relative is that the SM always has a low tone, and that some SM differ from those in the absolutive.

18.5.5 Conditionals/Subjunctive?

Faraclas has three forms translated by English conditionals:

- (17) a **ke ń-gé íkpá** ‘I could (should, will) have written a letter.’
(neutral focus)
- b **ke ń-gégê íkpá**
(as preceding but verb (written) focus)
- c **ke omô ó-fofôk íkpá** ‘3s could (should, will) have written a letter.’
(verb focus)
- d **ke má-gégê íkpá** ‘I could (should, will) have written a letter.’
(also with verb focus)

While he translates these by English conditionals, he labels them “subjunctives”. It is not clear to us why they are so labeled, for several reasons: Their tones do not correspond to the tones of any other subjunctives shown in the book; if all persons, not just the first person as illustrated, are compared to all other structures and tones shown in the book, they correspond to none (subjunctive or indicative); the 3s for the first two has anomalous **o-**, not the **i-** that occurs in other subjunctives. Finally, he says that this **ke** can occur with other subjunctives, and refers to it (p.58) as the “relative conjunction”, but its tone is low, while that of the relative conjunction is high. While we are therefore not sure that these are subjunctives, we are not sure of their status because none appears in context, so we prefer to call them conditionals.

18.6 Negation

Faraclas shows twenty-two contrastive verbal negatives, roughly half the number of positives, which means that some positive forms are neutralized in the negative. There are three morphological patterns in verbal negation¹². 1. The commonest involves **-ka-**, which occurs in the singulars of all non-“futures” and also in the plurals of the subjunctive, imperative, perfect, and “present simultaneous”. 2. With the exceptions just listed, all plural persons, including those in the “future”, are marked by **kpe-**, and preceded not by a SM but by the independent pronoun. 3. In both “futures”, singulars are marked by one of /-kaba-, -kpa, -kpaba-/. The result is an interlocking pattern illustrated in (18), with the negative morphemes underlined:

¹² All three patterns have [a] in 1s, [o] in 2s and 3s, and [e] in plural forms. It is tempting to posit that [kpa] is related to or derived from [ka] but it is not clear how. The “future” formatives [kaba] and [kpaba] seem to consist of [ka, kpa] plus [ba], which latter also occurs in some positive “future” forms. There does not appear to be a single tone associated with /ka/ or /kpa/.

(18) Negatives

Positive (s)	Negative (s)	Positive (p)	Negative (p)
ń-gé íkpá 'I wrote a letter.'	n-ká-gé íkpá	eji mń-fuk íkpá 'We read a letter.'	eji kpé-fuk íkpá
o-gégé íkpá 'You wrote a letter.'	o-ká-gégé íkpá	eji é-bóbókó íkpá 'We received a letter.'	eji kpé-bóbókó íkpá
gé íkpá 'Write a letter!'	ka-gé íkpá	i-fuk íkpá 'Read a letter!'	í-ka-fúk íkpá
n-gégé íkpá 'Let me write (SBJ).'	ń-ka-gégé íkpá	eji é-bókó íkpá 'Let us receive a letter.'	eji é-ka-bókó íkpá
mń-gé íkpá 'I'll write a letter.'	n-ká-ba-ge íkpá, or kpá-gé íkpá	eji mń-bókó íkpá 'We will receive a letter.'	eji kpé-bókó íkpá

The differences in these patterns do not seem really significant to us because they do not correspond to differences in aspect or mood, as they do in other languages examined. They either reflect singular versus plural (1. versus 2., above) or, in the case of [k] versus [kp] or [ka-ba] versus [kpa], possibly result from vowel loss and consonant assimilation. The vowel alternations seen in singular [ka] versus plural [kpe], and 1s [kaba] versus 2/3s [kobo] also occur in other morphemes at AM, e.g. in both modal "futures", so again do not seem significant.

18.7 'Be', auxiliaries

Faraclas (55-6) suggests that five verbs correspond in some way to English 'be': **-wá** '(there) is/are'; **-ré** equational/copula 'be', also 'arrive'; **-kúp/-kwéek** 'sit, sit down, be, be located temporarily'; **-lúk** 'be located (permanently)'; 3s postfocus form of **-bét** 'be like' plus **lék** 'body' renders 'seem, appear, be like'. Examples, all Factative¹³:

- (19) a **ogwú íjéjeen omń ó-wá**
 person teacher (=INF+ verb focus) 3s.PRO 3s-be.FAC
 'There is a teacher (there).'
- b **Áyija i-re ogwú íjéjeen**
 Ayija 3s-be.FAC person teacher
 'Ayija is a teacher.'
- c **Ntija í-kup me Átábá**
 Ntija 3s-sit.FAC in Ataba
 'Ntija is staying in/is visiting Ataba.'

¹³ They are Factative simply because none contains the Imperfective marker /ki/. We note in passing that 'be' in other Niger-Congo languages examined does not always behave as other verbs in terms of FAC versus IPFV.

- d **Ntíja í-lúk me Átábá**
 Ntíja 3s-be.FAC in Ataba
 ‘Ntíja lives in Ataba.’
- e **í-bét lék mǎ-ge íkpá**
 3s-be.like.FAC body 1s.M-write letter
 ‘It seems that I will write a/the letter.’

Neither auxiliary nor modal verbs seem to play any central role in Obolo. Obolo has many serial verb constructions, in which the first verb inflects and all others are infinitives, as in:

- (20) **ǎ-fuk í-gé í-kwééǵ í-sibí**
 1s-read INF-write INF-study INF-go.out
 ‘I read, wrote, studied, and went out.’

‘Go, come, do first, do repeatedly, do again, bring together, begin’ often occur as the first verb in such constructions ((21a-d)), and ‘finish, do more than, do most, do a lot, do fully, be many’ often follow other verbs ((21e-g)). Verbs corresponding in meaning to English modal meanings often occur followed by one infinitive: ‘know, be able, want, must, begin’ ((21h-j)).

- (21) a **ǎ-sí í-gé íkpá**
 1s-go INF-write letter
 ‘I went (and) wrote a letter.’
- b **ǎ-ní¹⁴-gé íkpá**
 1s-come.INF-write letter
 ‘I came (and) write a letter.’ (it came to pass that...)
- c. **m-kpǎkpǎk í-kí-gé íkpá**
 1s.RED.repeat INF-IPFV-write letter
 ‘I kept on writing the letter.’
- d **m-kpǎkpǎk í-yá í-kí-gé¹⁵ íkpá**
 1s.RED.repeat INF-do.again INF-IPFV-write letter
 ‘I rewrote the letter.’
- e **ǎ-gé íkpá í-sǎǵá**
 1s.write letter INF-finish
 ‘I finished writing the letter.’

¹⁴ **Nú** ‘come’ + **í** INF > [ní].

¹⁵ As (21d, i) show, the infinitive can be IPFV (**kí**) or verb focus (RED).

- f **ń-gé íkpá í-gak ogót**
 1s.write letters INF-surpass 3s
 ‘I wrote more letters than 3s did.’
- g **ń-gé íkpá í-wá**
 1s-write letters INF-be.many
 ‘I wrote many letters.’
- h **n-ryon ń-gé íkpá**
 1s-know INF-write letters
 ‘I can/know how to write letters.’
- i **ń-week ń-gêge íkpá**
 1s-want INF-RED.write letter
 ‘I want to write a letter.’
- j **ń-béné ń-gé íkpá**
 1s.begin INF-write letter
 ‘I began to write a letter.’

19

Otoro

(Central Heiban, Kordofanian)

Derek Nurse

19.1 General

Otoro is a member of the “central branch of the Koalib-Moro¹ group” (Schadeberg, p.1) of Kordofanian, spoken in the Nuba Mountains of southern Sudan, a linguistically fragmented area. The current classification of Kordofanian may not be totally reliable. Most linguistic populations in the area are small, there being “upwards of 15,000” (ibid) speakers of Otoro, and approximately 300,000 speakers of the some twenty varieties of Kordofanian. The latter figure excludes a few groups for whom no demographic data is available and may not allow for disruptions caused by political instability in recent years. Kordofanian languages “remain the most poorly documented languages within Niger-Congo” (Williamson & Blench 2000:17), despite current research on some varieties².

Our source is Schadeberg (ms), an edited version of a manuscript by R. C. Stevenson (1943), hereafter abbreviated SS (or sometimes just S, for Stevenson). We also consulted material on other Kordofanian varieties, such as Kossmann’s (2004) analytical summary of Black & Black (1971), Tucker and Bryan (1966), Williamson & Blench (2000), Jenks & Rose (2006), and Rohde (2006). There is also a San Diego manuscript, which we have not seen. We have corresponded with the Leiden and San Diego groups, and we thank both for their comments.

Otoro has thirteen vowels, of which nine are the “main” vowels, [i, e, ε, u, o, ɔ, a, ə, ø], the latter representing a “higher mid central vowel”, Stevenson’s manuscript belonging to the pre-phonemic era³. There are also five diphthongs. The consonant system includes a contrast between alveolar and dental stops, and has three liquids (lateral, rolled *r*, flapped *r*).

Stevenson (1943: 26) says Otoro is not a tone language “in the fullest sense of the term – that is to say, inherent tone plays little part in distinguishing words, dynamic accent or stress being more important”. However, some data and some remarks by Schadeberg suggest Stevenson may have misjudged this and tone may be more central than he thought. We ignore prosodic markings⁴.

Most syllables are open, consisting of consonant (or consonant combination) plus vowel, although a few consonants may form closed syllables.

Otoro is a noun class language, there being ten singular/plural pairs, an eleventh with singulars only, an infinitive class, and a few anomalous nouns.

¹ Koalib-Moro corresponds more or less to Williamson and Blench’s (2000) Heiban.

² Scholars in Leiden and San Diego are presently working on Kordofanian.

³ “Main” vowels do not necessarily correspond to vowel phonemes. Kossmann describes closely related Moro as having seven contrastive vowels, no distinctive length, and vowel harmony.

⁴Black & Black (1971) and Jenks & Rose (2006) analyze Moro as having tone and stress. The latter mark tone consistently.

19.2 Word order

Otoro is most often S V O (Other). IO appears to precede DO if they co-occur. However, in certain combinations of aspect and pronoun (see §19.5, below) and after certain conjunctions, S is postposed, as is the SM:

- (1) **ɲəno ɖir-ɔ magari**
when sleep-3s brother
'When my brother was sleeping⁵'

19.3 Verb structure

It is not easy to state a single simple verb structure because of the behaviour of subject and object pronouns, so this template below ignores them, shows the most typical synthetic structure and then discusses other possibilities in §19.5.

n(a)- HAB(itual) – SM – **formative** – root – extension – final vowel – OP – (plural) IMP

n(a)- 'and, narrative'. SS show this is mainly as proclitic but occasionally as independent of the main verb.

HAB: **at̩ (i)-**. The second vowel assimilates to the SM, giving a range of forms, including **at̩-i-d̩-ire** 'I may sleep (HAB)', **at̩-a-ɖire** 'you may sleep', **at̩-u-ɖire** '3s may sleep', etc. This and a preceding narrative give [**nat̩i**]. A full form [**nat̩i**] (**n+at̩i**) occurs independently phrase initially before a noun (1943:143). This only occurs with SBJ suffix.

SM: Person and class concord markers occur here. Some SM shapes are in listed in (3).

Formative: **-Ø-** (occurs with all three final vowels). In the absence of (T)AM markers in this position, the final vowel alone conveys grammatical meaning (e.g. SBJ, IPFV); **-a-FUT/PROS** (occurs with the SBJ suffix and (negative) IPFV/VEN); **-ma-** Perfect (with SBJ suffix and IPFV); **-at̩i-** Habitual (with SBJ suffix and IPFV/VEN); **-I-/li-/la-**⁶ "Dependent Future" (only with SBJ suffix).

Root: roots have one, two, or three syllables, thus CV, (C)VCV, (C)VCVCV.

Extension: not all extensions occur with all verbs; not all are equally frequent: some co-occur: some but not all occur with all three final vowels. Examples are given in (4), in the main shape(s) given for each.

⁵ Also **ɲəno ne magari ɖir-e**, lit. 'when and my brother sleep-SBJ'.

⁶ This **-I (V)-** occurs as simple FUT/PROS in neighbouring varieties such as Kwijur and Orombe.

Final vowel: there are three contrasting final vowels⁷. They are, with our interpretation and labels (summarized in tabular form in (2)):

1. [u] or [ɔ] Factative (SS' "first stem")
2. [i] or [ɛ], Subjunctive (SS' "second stem" or "Dependent"⁸)
3. Mostly [a], some [o], Imperfective/Ventive (SS' "third stem")⁹. Most Factative [u] and [ɔ] correspond to Subjunctive, [i] and [ɛ], respectively. Verbs with FAC [ɔ] and SBJ [ɛ] always have IPFV/VEN [a], but verbs with FAC [u] and SBJ [i] are less predictable, some having IPFV/VEN [a], others [o]. The reason for labeling this "IPFV/VEN" will be discussed in §6, and exemplified in (4) and (11).

(2) Otoro final vowels:

SS	Stem 1	Stem 2	Stem 3
	FAC	SBJ	IPFV/VEN
	-u/-ɔ	-i/-ɛ	-a/(-o)
	-ɔ/-jɔ	-jɛ	-ja

OM: some OM shapes are listed in (3). As far as we can see, only one suffixal OM is allowed.

IMP (plural): **-(i)l** (see §19.7.2).

Subject and object pronouns have several shapes, so in (3) we list just those that appear in this text. In (4) we exemplify the extensions. All other categories mentioned above are exemplified below at various points.

(3) The SM and OM shapes that occur in this text (hyphens omitted):

	Singular	Plural
Independent pronouns (S=O)		
First person	ŋi, i	anaŋa ¹⁰
Second person	ŋa, a	nyaŋa
Third person	ŋu	ŋul(ŋa)
Affixed SM and OM		
General concord	gwu ¹¹	li

⁷ Within each of the three there is vowel variation. The quality of the final vowels does not result from obvious vowel harmony with the root. Although the occurrence of the allomorphs may have been predictable historically, it is not today and has to be treated as lexically determined.

⁸ As far as possible, we would like to keep form and function distinct. We regard "Subjunctive" as a form, which has various functions, including "Dependent".

⁹ A smaller number of verbs have only one or two suffix shapes. The distribution of stems and shapes is similar but not identical in Moro. It would be interesting to compare these shapes across Kordofanian.

¹⁰ Only exclusive ('we', not including 'you') is used.

First person	ŋi, i	ana
Second person	(a)ŋa, a, o	(a)nya
Third person	ŋu, u, o	l, li, lo

(4) Examples of extensions (plus Reduplication, including the Frequentative)

Dative (-**ijo**) **-ap-a** ‘bring’ **-ap-ijo** ‘bring for’
 -man-u ‘cook’ **-man-ijo** ‘cook for’

Passive/Reflexive (-**inu**) **-man-u** ‘cook’ **-man-inu** ‘be cooked’
 -pi-di ‘beat’ **-p-inu** ‘be beaten, beat o.s.’

(The passive can occur with the different final vowels: **-pinu, -pini, -pino**).

Comparative (-**anu**) **-man-u** ‘cook’ **-man-anu** ‘cook better than’

Reciprocal (-(**ag**)-**ido**) **-man-u** ‘cook’ **-man(ag)-ido** ‘cook for each other’

Applied/Deprivative (-**edi/-ödi**) **-y-u** ‘drink’ **-y-edi** ‘drink from’
 -akir-i ‘break’ **-akir-ödi** ‘break off’

Causative (-**i**) **-umin-o** ‘be black’ **-umin-i** ‘blacken’

Directional (Itive versus Ventive, from and to speaker, or just Ventive)

-ap-o ‘take away’ **-ap-a** ‘bring (to)’
-gul-u ‘climb (away)’ **-gul-o** ‘descend toward’
-adi ‘go in from’ **-adi-o** ‘go in to’
-man-u ‘cook’ **-man-a** ‘cook and return’
-dir-o ‘sleep’ **-dir-a** ‘sleep and return’

Frequentative (= reduplication) **-umödi** ‘talk’ **-umömödi** ‘keep on talking’

19.4 Compound verbs: locative ‘be’ and main verb = Progressive

Otoro has two verbs that correspond to English ‘be’: equational/copular ‘be’ (-**ruđi, -ro, -ruđa**), and locative ‘be’ (-**jo, -o, -je, -ja**). Locative ‘be’ is anomalous in three ways:

1. it is the only verb to unambiguously distinguish present (5b) and past (5c) reference
2. it has not one but two (-**o, -jo**) morphologically “Factative” forms, forms which don’t occur elsewhere in the conjugation

¹¹ **Gwu-** is the concord not only with the singular of persons, but also of two noun classes.

3. the “present” (that is, the form that is morphologically Factative, in (5b)) functions as an Imperfective¹². We say that because, in our experience, a meaning such as that in (5b) is universally Imperfective.

We can imagine two possible reasons for the irregularity of the ‘be’-locative: we don’t try to judge between the two. One is that ‘be’ often has aberrant paradigms cross-linguistically. The other is that, for reasons not clear, the functions of the IPFV in Otoro seem to have shrunk (see §19.6), so maybe the functions of the FAC expanded simultaneously.

Although both ‘be’ verbs take the same aspectual and modal affixes as regular verbs, they do not behave semantically as other verbs, as seen in the following examples:

- (5) a **ŋi gwu-rɔ gwele**
 1s CON-be chief
 ‘I am/was a chief.’
- b **ŋi gw-ɔ dunu** ‘I am at home.’
- c **ŋi gwu-jɔ dunu** ‘I was at home.’

The ‘be’-locative co-occurs with main verbs in the Factative to indicate Progressive:

- (6) a **ŋi gw-ɔ gwu-man-u**
 1s CON-be.FAC CON-cook-FAC
 ‘I am cooking.’
- b **ŋi gwu-jɔ gwu-kur-u likaragɛ**
 1s CON-be.FAC CON-hoe-FAC yesterday
 ‘I was hoeing yesterday.’
- c **ŋi gw-a-jɛ gwu-ɖir-ɔ**
 1s CON-FUT-be.SBJ CON-sleep-FAC
 ‘I’ll be sleeping.’
- d **ŋi gwu-ma-jɛ gwu-riɖ-ɔ**
 1s CON-PFT-be.SBJ CON-dance-FAC
 ‘I have been dancing.’
- e **ŋi gw-aɸi-jɛ gwu-pi-ði**
 1s CON-HAB-be.SBJ CON-beat-FAC
 ‘I am always beating.’

¹² SS represent ‘be’-locative as: **-jɛ** FAC (“first stem”): **-ɔ/-jɔ** SBJ (“second stem”), **-ja** IPFV/VEN (“third stem”). The vowels of FAC and SBJ here run contrary to the morphological behaviour of most other verbs, and we have taken the liberty of reversing them, so we interpret them as: **-ɔ** (present)/**-jɔ** (past) FAC=first stem, **-jɛ** SBJ= second stem, **-ja** IPFV/VEN= third stem, respectively. In either interpretation, what is seen in (5b) and (6a) is functionally anomalous. As with other verbs, the IPFV/VEN form means ‘be in a place and return’. The final vowels of copula ‘be’ are similarly anomalous.

- h. OM...PFT...SM...OM...V **ŋi # li-m(a)-i-l-pi**
 1s # 3p-PFT-1s-3p-hit.SBJ
 ‘I have hit them.’
- i. OM...V...SM...OM **ŋi # li-pi-ð(i)-i-lɔ**
 1s # 3p-hit-FAC-1s-3p
 ‘I hit them.’

19.6 Aspect

As SS, we see a tripartite contrast between what we call Factative (SS’s first stem), Imperfective/VEN (SS’s third stem), and Subjunctive (SS’s second stem). Since we regard Subjunctive as a mood (see §19.7.1, that leaves FAC versus IPFV/VEN as the main aspectual contrast, expressed suffixally (see table in (2)). On top of this are several other aspectual categories, expressed prefixally: Habitual, Perfect, Future/Prospective¹³. Finally, a Progressive is formed by preposing the auxiliary ‘be’-locative to a Factative main verb¹⁴.

The fit between SS’ first stem and our Factative is reasonably good. With dynamic verbs (the majority), the Factative represents a situation as a complete whole and is indifferent to time-- that is, it can represent past or present situations¹⁵:

- (8) a **liji** **li-riṭ-ɔ**
 people CON-dance-FAC
 ‘(the) people dance’
- b **liji li-riṭ-ɔ likaragɛ** ‘(the) people danced yesterday’

Under their long list of examples, SS say the present can be substituted for the past and vice versa. The Factative also occurs in the positive Imperative:

- (9) **ḍir-ɔ** ‘sleep!’, **man-u** ‘cook!’

With stative verbs¹⁶, the Factative represents present state. Stative verbs may also occur in the Perfect. The first six examples are Factative, the last two Perfect:

- (10) a **mörṭa** **gwu-min-ɔ**
 horse CON-black-FAC
 ‘The horse is black.’

¹³ We do not see Narrative as an aspect. It occurs with several aspectual and modal categories and is apparently a clitic functioning as a discourse device,

¹⁴ Moro has an almost identical set of categories, but their exponence is different, Otoro having more inflection, Moro greater use of auxiliaries.

¹⁵ We found no clear examples with future reference.

¹⁶ Stative verbs exemplified are: ‘be afraid’, ‘be asleep’, ‘be big’, ‘be black’, ‘be good’, ‘be heavy’, ‘be many’, ‘be missing’, ‘be red’, ‘be sick’, ‘be tall’, ‘be well’, ‘go (?)’, ‘live’, ‘see’, ‘understand’. Kossmann has others for Moro.

- b **ηi gwu-ðony-ɔ**
1s CON-fear-FAC
'I am afraid.'
- c **ηa gwu-diηin-u a**
2s CON-hear-FAC Q
'Do you understand?'
- d. **ηi gwu-maη-u liji li-rit-ɔ**
1s CON-see-FAC people 3p-dance-FAC
'I saw the people dance.'¹⁷
- e **ηenɔ ðir-u**¹⁸
when sleep-3s
'When he was asleep...'
- f **ηa gwu-ðir-ɔ**
2s CON-sleep-FAC
'You are/were asleep.'
- g **ηa gwu-ma-ðir-ε**
2s CON-PFT-sleep-SBJ
'You have slept.'
- h **ηa gwu-ma-ðir-a**
2s CON-PFT-sleep-IPFV
'You have slept (and returned).'

The Imperfective/Ventive is listed with a set of functions, viz:

(11) Positive imperative: **ðir-a** 'Sleep (and return)!' **man-a** 'Cook (and return)!'

Negative imperative: **(aʔa) ηa-ðir-a** 'Don't sleep!',
(aʔa) ηa-man-a 'Don't cook!'

Dependent: **abirici-ηi i-ðir-a**
let-1s 1s-sleep-IPFV
'Let me sleep (and return).'

¹⁷ We have changed SS' 'dancing' in this example to 'dance'.

¹⁸ The FAC suffix elides to the postposed SM.

FUT/PROS: **ŋi gw-a-ḍir-a** ‘I will sleep (and return).’

Habitual: **ŋi gw-aṭi-ḍir-a** ‘I sleep habitually (and return).’

Habitual Dependent: **abirici-ŋi aṭ-i-ḍir-a**
let-1s HAB-1s-sleep-IPFV
‘Let me sleep (as a rule) (and return).’

aṭ-i-ḍir-a ‘I (may) sleep (habitually) (and return).’

Perfect: **ŋi gwu-ma-ḍir-a** ‘I have slept (and returned).’

ŋi gwu-ma-man-a ‘I have cooked (and returned).’

Infinitive: **ḍi-ḍir-a/ḍa-ḍir-a** ‘to sleep, sleeping’

All these functions apparently overlap with that of the Subjunctive (see §19.7.1 and §19.8, below), the only difference being that the Imperfective/Ventive includes the infinitive and negative Imperative. What is the central functional/semantic core of these “IPFV/VEN” forms? Why do their functions overlap with those of the Subjunctive, and how do they differ?

The key seems to lie in the dual nature of the IPFV/VEN, where two suffixes of the same shape apparently co-exist, one IPFV, the other Ventive. SS offer two approaches to this. One is that Otoro has a small set of directional verbs of motion, in which one member of the set has the first (Factative) stem and represents direction away (“Itive”), whereas the other member has the third stem (our Imperfective) and represents movement towards (“Ventive”): thus **-ap-o** ‘carry away = take’ and **-ap-a** ‘carry toward = bring’¹⁹. While most verbs do not behave like this, it can be seen in (11) that many of the examples are glossed as “verb (and return)”. That is, in the motion verbs, the FAC represents motion away, the IPFV/VEN motion toward the speaker. In all other verbs, the Factative is neutral about motion, while the Ventive represents motion toward. Stevenson (1943:10,27) further says at one point “the function of the 3rd stem is largely directional, and no doubt this was its sole function originally”. However, he seems to have had a later change of mind, as a note in the margin says “purge 3rd stem of all directional implication. Give only neg. imp” (he forgot the infinitive). That is, he realized there were two functions, Imperfective in the negative Imperative and Infinitive, Ventive in all other forms, the majority.

The other approach is, discussing the functions of forms with the same suffix in neighbouring Tira, SS say they have “incomplete/indefinite” meaning (our Imperfective), but that the situation in Otoro is “not quite so clear-cut”. This implies Otoro could once have behaved as Tira but has changed. It is possible to go a little further. SS also include a brief overview of Heiban, and Kossmann (2004) shows Moro, so we have data from Otoro, Tira, Moro, and Heiban. Tira and Moro have the IPFV in a limited range of functions, mainly with present/indefinite reference: Otoro has IPFV (as opposed to

¹⁹ The verbs are: ‘climb up (from, to)’, ‘descend’, ‘enter’, ‘flee’, ‘go back’, ‘go/come’, ‘pull’, ‘push’, ‘run’, ‘take/bring’, ‘take back’.

Ventive) in an even more limited range of contexts (negative Imperative, Infinitive): Heiban is said to have no IPFV **-a** at all. Otoro appears to be the only one with this Ventive meaning.

Are the Imperfective and the Ventive connected, and if so, what was the older situation? We are in a difficult position, having no direct access to real speakers of Otoro. Our approach is systemic. There are three clear stems, suffixally marked. One corresponds reasonably well to Factative, exemplified in (6, 7, 8, 10). Another corresponds fairly well to Subjunctive/Dependent (§19.7.1 and (12)), following). Systemically, the existence of Perfective/Factative usually goes hand in hand with Imperfective: it does cross-linguistically and it does elsewhere in Niger-Congo. So we assume the older situation had a Perfective/Factative and an Imperfective. For unknown reasons, the domain of the Imperfective has shrunk, somewhat in Moro and Tira, further in Otoro, completely in Heiban. The Imperfective is only kept in the Infinitive and negative Imperative, which are quintessentially imperfective in nature, while its older functions of the Imperfective have been distributed among Factative and Subjunctive. At the same time, since this Ventive appears in Otoro and is not apparently so attested in the other dialects, we think it must somehow derive from the older Imperfective, although we are not clear about how the change took place.

If we go back to the start of this discussion, just under (11), above, then in fact the functions of SBJ and Imperfective do not overlap because most of the “Imperfectives” are Ventives, as summarized in §19.8, below.

19.7 Other verbal categories

19.7.1 *Subjunctive*

SS have a third stem marked suffixally by a single mid [ɛ] or high [i] front vowel. It occurs in a range of functions, viz:

1. “Dependent”, that is, after another verb (‘come, go, allow, tell, forbid, find, help, find, see, etc; in a “sequence of actions”²⁰; after certain conjunctions (‘when, in order to, so that’) to indicate purpose.
2. “Permissive” (‘We may sleep’, ‘May we sleep?’), including the polite Imperative
3. Future, independently and after other verbs.
4. Habitual and Habitual Dependent.
5. Perfect

(12) Dependent: a **idi ŋa-ɗir-ɛ**
 go 2s-sleep-SBJ
 ‘Go and sleep.’

²⁰ The examples with sequences of actions are rather long to quote, so are here summarized. In such a series, the first verb is typically in the Factative (i.e. past) or Future, all subsequent verbs being in the “dependent” Subjunctive, preceded by the conjunction **n(a)-**. There is no sense of purpose in these sequences. In a sequence of habitual events, the first verb is in the Habitual, all following verbs being in the Habitual or the Future, itself is based on the Subjunctive.

- b **abirico gwukəŋu gwu-man-i**
 let Gwuko CON-cook-SBJ
 ‘Let Gwuko cook.’
- c **umödiŋo gwukəŋu gwu-ɖir-ε**
 tell Gwuko CON-sleep-SBJ
 ‘Tell Gwuko to sleep.’
- d **ŋi gwu-bəj-ɔ liji n-al-riŋ-e**
 1s CON-find-FAC people NAR-3p-dance-SBJ
 ‘I found the people dancing.’ (cf (10d), above)
- e **ŋɛnɔ n-i-ɖir-ε**
 when and-1s-sleep-SBJ
 ‘When I was sleeping...’²¹
- f **ðɛði-ŋi gia y-ε-ε**
 give-1s asida 1s-eat-SBJ
 ‘Give me *asida* to eat’ (lit. ‘that I may eat’)

Permissive: **i-ɖir-ε a** or **i gw-a-ɖir-ε a**
 1s-sleep-SBJ Q, 1s CON-FUT-sleep-SBJ Q
 ‘Shall/may I sleep?’

Future: **ŋi gw-a-ɖir-ε** ‘I will sleep.’

Future Dependent: **ila a-la-moj-ε**
 come 2s-FUTDEP-sweep-SBJ
 ‘Come and sweep.’

Habitual: **ŋi gw-aŋi-ɖir-ε** ‘I sleep (habitually).’

Habitual Dependent: **aŋi-ɖir-ε** ‘I (may) sleep (habitually).’

Perfect: **ŋi gwu-ma-man-i** ‘I have cooked.’

Shared shape would be expected to be linked to shared function and meaning. In this case, where these forms share suffixal [ε, i], it is hard to see a single common semantic or functional connection for the whole set, which is presumably why SS chose the neutral label “second stem”.

We do see a well-established conventional link between some of the functions listed and the notion of Subjunctive. Subjunctives are widely used crosslinguistically as Permissives and in the range of dependency described. Since Subjunctives and Futures

²¹ Also **ŋɛnɔ n-i-ɖir -a** (IPFV), and **ŋɛnɔ ɖir -i** (where [i] = FAC 1s).

share the central components of modality and irrealis, Subjunctives often become used in future reference and then become Futures. Elsewhere in Niger-Congo, a mid or high front vowel is the morphological expression of Subjunctive.

However, we do not see a clear path from the foregoing to Habitual²² or Perfect. Published works on the direction of grammatical change, such as Bybee et al (1991) and Heine and Kuteva (2002), are also silent on subjunctives as a source for Habituals or Perfects. Nor do they offer suggestions as to why Habitual and Perfect might be morphologically linked. We choose to interpret this provisionally as Subjunctive, for the positive reason that a central core of the functions above can be interpreted as Subjunctive or Subjunctive-linked, and the negative reason that no other obvious hypothesis offers any other better solution²³.

19.7.2 Imperative

Singular Imperative consists of root and final vowel. Pronominal objects are suffixed to the final vowel. The plural Imperative suffixes **-(i)l** to the singular. All three final vowels can occur in Imperatives. Dependent (Subjunctive) and Habitual forms also occur.

(13)	Singular	Plural	S + O (pro)	P + O (pro)
	FAC	ḍir-ɔ ‘sleep!’	ḍir-il	
		man-u ‘cook’	man-il	
		ḍeḍ-i ‘give’	ḍeḍ-il	ḍeḍ-i-ŋi gödo
				ḍeḍ-i-ŋi-l gödo
			‘Give (s) me a book!’	‘Give (p) me a book!’
	IPFV	ḍir-a ‘Sleep (and return).’	man-a ‘Cook (and return).’	
	SBJ	ŋa-ḍir-ɛ	‘You may sleep.’	
	Dependent	iŋi ŋa-ḍir-ɛ	‘Go and sleep.’	
	HAB	aŋ-a-ḍir-ɛ	‘Sleep habitually.’	

Negative Imperatives are expressed by using the IPFV form [unclear here!](for examples, see (15c,d,e) below) or the SBJ (14f), and the sentence-final negator **no**.

²² In a few Bantu languages there is an apparent connection between Habitual and Future. Habituality may lead to future reference, because if something is habitual, it is predictable and thus likely to occur in the future. But in Otoro, the core seems to be Subjunctive (Dependent, Permissive, Future), which means the path would have been Subjunctive > Habitual, a path we have not seen elsewhere and are at a loss to explain.

²³ In Moro, suffixal **-e** also occurs in some unusual contexts, e.g. present Progressive.

19.8 Summary of co-occurrence of (suffixal) FAC, IPFV/VEN, SBJ with other categories (Our interpretation of the two functions of the **-a/-o** suffix is indicated by the content of the brackets.)

	FAC -o or -u	IPFV/VEN -a, o	SBJ -ε, i
∅	yes	yes (Ventive)	yes
Imperative	yes	yes (Ventive)	yes
Negative IMP		yes (IPFV)	
With 'be' = PRG	yes		
-a- FUT/PROS		yes (Ventive)	yes
-la- FUT DEP			yes
-ma- Perfect		yes (Ventive)	yes
-ati- Habitual		yes (Ventive)	yes
#at- HAB DEP		yes (Ventive)	yes
ði-/ða INF		yes (IPFV)	

19.9 Negation

The main negative strategy involves the subjunctive form (**-at-ε**) of the verb **-at-iði** 'be missing, lack, fail', acting as auxiliary verb before the main verb, followed in sentence final position by the adverb **nɔ** 'no, not'. Some examples in the text show **nɔ** omitted. The following examples are not exhaustive:

- (14) a **ɲi gw-at-ε gwu-man-u jiði nɔ**
 1s 1s.CON-fail-SBJ 1s.CON-cook-FAC meat NEG
 'I do/did not cook meat.' (FAC)
- b **ɲi gw-at-ε gw-o gwu-iṭ-i jiði nɔ**
 1s 1s.CON-fail-SBJ 1s-be 1s.CON-eat-FAC meat NEG
 'I am not eating meat.' (PRG)
- c **ɲi gw-at-ε gwu-ma-man-i jiði nɔ**
 1s 1s.CON-fail-SBJ 1s.CON-PFT-cook-SBJ meat NEG
 'I haven't cooked meat.' (PFT)
- d **(ko) gw-at-ε ma-ḍir-a nɔ**
 (but) CON-fail-SBJ PFT-sleep -IPFV NEG
 '...(but) he hasn't slept.' (PFT)
- e **ɲi gw-at-ε gw-a-man-i jiði nɔ**
 1s 1s.CON-fail-SBJ 1s. CON-FUT-cook-SBJ meat NEG
 'I won't cook meat.' (FUT)
- f **ɲa ɪla a gw-a-ḍir-ε nɔ**
 2s go a 2s.CON-FUT-sleep-SBJ NEG
 'Don't go to sleep.' (FUT)

g **ηα gw-at-ε** **gw-aḡi-man-i** **jiði nɔ**
 2s 2s.CON-fail-SBJ 2s.CON-HAB-cook-SBJ meat NEG
 ‘You don’t cook meat.’ (HAB)

h **(ko) gw-at-ε** **gw-aḡi-ḡir-a** **nɔ**
 (but) CON-fail-SBJ CON-HAB-sleep-IPFV NEG
 ‘...(but) he didn’t use to sleep.’

The few minor, less frequent, strategies are exemplified in (15) and briefly discussed following:

(15) a **...liji al-riḡ-ε nɔ**
 ... people 3p-dance-SBJ NEG
 ‘...(told) the people not to dance, they shouldn’t dance.’

b **ηα abirico gwukɔḡu gw-a-ḡir-ε nɔ**
 2s let Gwuko CON-FUT-sleep-SBJ NEG
 ‘Don’t let Gwuko sleep!’ (lit. ‘Don’t let that he will sleep’)

c **(aḡa²⁴) ηα ḡir-a nɔ**
 (HAB) 2s sleep-IPFV NEG
 ‘Don’t sleep!’

(aḡa) ηα-man-a nɔ
 (HAB) 2s-cook-IPFV NEG
 ‘Don’t cook!’

d **ηα-(v)il-a ηα-ḡir-a nɔ**
 2s-go 2s-sleep-IPFV NEG
 ‘Don’t go and sleep!’

e **... ηα-riḡ-a nɔ** (NEG IMP)
 ...2s-dance-IPFV NEG
 ‘(He told you) not to dance’ (= ‘don’t dance’)

f **ηα gw-ɔ gw-a-ḡir-ε**
 2s 2s.CON-be 2s.CON-FUT-sleep-SBJ
 ‘You are not to sleep.’

g **ηα gw-ɔ gw-ε-lε a gw-a-ḡir-ε**
 2s 2s.CON-be 2s.CON-go a 2s.CON-FUT-dance-SBJ
 ‘You are not to go and sleep.’

²⁴ SS interpret this initial **aḡa** and the pre-radical **aḡi** as identical, both Habitual.

Structures such as that in (15a) may derive from deletion of **-at-ε**, because the text shows an alternative with **-at-ε**. The four examples in (15c,d,e) are apparently all the same, all non-subjunctive, all negative imperatives, having in common sentence-final **nɔ**. (15b) probably fits here, too, as the sentence final **nɔ** belongs with **abirico**²⁵ ‘allow, let’, leaving ‘sleep’ as a future positive. (15f,g) involve locative ‘be’ followed by a Future/Dependent form of the lexical verb (‘you are + you will verb’), with no overt marker of negation.

²⁵ It is impossible to tell the aspectual status of **abirico**, because its final vowel never changes.

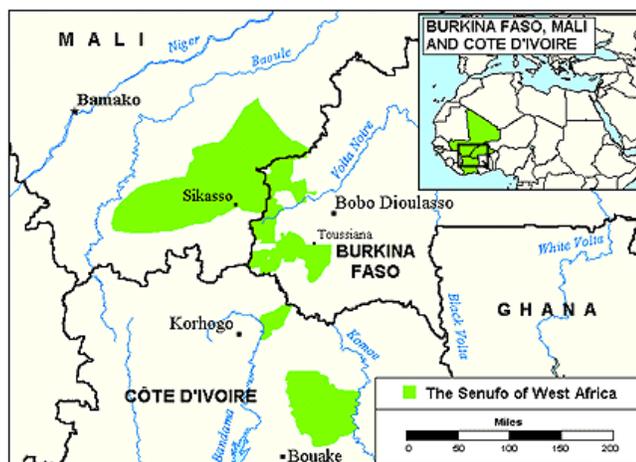
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Supyire¹ (Senufo, Gur) Sarah Rose/Christa Beaudoin-Lietz

20.1 General

This chapter discusses Supyire, a member of the Northern branch of the Senufo language group². Estimates of speakers of Senufo languages vary from around 1.5 million to well over 2 million, in Côte D'Ivoire, Mali and Burkina Faso. Senufo can be divided into different branches, the northern one, to which Supyire belongs (also Sicité and Marmara), the central (e.g., Cebaara and Syenara) and the southern one. The Senufo languages are geographically contiguous with Mande languages and share several features with them³.

The Supyire are said to number between 350,000 (SIL 2007) and 621,000 (the Joshuaproject); they are located in southeastern Mali in the region of Sikasso. Published sources on Supyire are very few: we rely on Carlson's recently published grammar (1994). Carlson's grammar is based on functional-typological theory. The spelling is phonemic and follows the cited grammar in its conventions, which in turn follows standard conventions according to the *Direction Nationale d'Alphabétisation Fonctionnelle et de Linguistique Appliquée*⁴:



Map source: Bethany World Prayer Center

¹ This chapter was written in collaboration with Christa Beaudoin-Lietz.

² Abbreviations used in this chapter refer to terms used in Carlson's grammar and include: IP 'intransitive prefix'; FP 'future prefix' (see §20.3.1 for details); ND 'non declarative'; REM(P) 'remote (past)'; REC(P) 'recent (past)'; SC 'serial connector'; SSC 'subjunctive serial connector'; EXCL ('exclamative particle'); INDEF ('indefinite pronoun or determiner').

³ For example, the type of word order in which one argument (direct object) precedes the verb while others (the indirect object, etc.) follow the verb. Not only is lexical borrowing from Mande languages heavy, there is evidence for syntactic and typological influence as well. Carlson (1994:2) notes evidence of grammatical constructions borrowed from Bambara, as well as typological influence: Supyire is predominately SOV (as are Mande languages), rather than the more typical SVO (as in NC in general).

⁴ Generally IPA, to be noted $y = [j]$, $j = [ɔ̃]$, $c = [tʃ]$, $zh = [ʒ]$, $sh = [ʃ]$, $h = [ʔ]$. In spelling, a nasalized vowel is indicated by an 'n' after the vowel, $[r]$ = flap variant of /d/ medially before unstressed vowel, but written as *r*. /g/, when flapped before unstressed vowel, = [R].

Supyire has seven oral (/ i, e, ε, a, u, o, ɔ /) and five nasalized (/ ĩ, ě, ã, ũ, õ /) vowels⁵. All vowels may be either short or long (indicated by doubling the vowel in orthography). Vowel harmony (which works from left to right) with unstressed vowels is pervasive, though certain morphemes do not harmonize (e.g. the definite noun suffix).

Supyire is a tone language of high complexity. There are four phonemic tones: high (´), low (`), and two mid tones-- strong mid (Ms) and weak mid (Mw). The mid tones are unmarked in spelling. The symbol (^) indicates a sequence of two tones: HL (as in the morpheme **nĥ** that marks “Recent Past”). Floating tones also exist (see examples under Negation). Tonal rules can apply across several (closely syntactically-linked) items in the sentence (e.g., DO and V).

There are no closed syllables in Supyire: syllable structure is CV or CVV. A few words, for example some pronouns, can consist of a V-initial syllable. Verb roots may have the following shapes: CV, CVV, CVCV, CVVCV, or CVCVCV. Most lexical roots are stressed on the first syllable. Affixes, clitics, and most other grammatical morphemes do not have stress by themselves, but many acquire stress in compounds. Most verbs are di- or tri-syllabic with stress on the initial syllable (Carlson 1994:32). Supyire has a noun-class system, marked on the noun at suffix (as in Kisi and Fula).

20.2 Word Order

Word order is S AUX DO V O(ther)⁶ (see examples in (15)). Sentences without AUX occur as in (1) with a copula, though most verb phrases contain at least one AUX, and several AUXs can co-occur.

- (1) **mĥi nyε yĥi nŭgi**
 1s be 2p mother.DEF
 ‘I am your mother.’ (1994:238)

In (1) the copula is followed by a predicate nominal; the element following the verb, if present, could also consist of a postpositional phrase (e.g. dative, locative) or adverb. The schema does not mean to imply that elements cannot occur before the S. For example, focused constructions, heavily stressed, occur at the beginning of the sentence (see also §20.6.3). The following is such an example of an affirmative declarative simple sentence:

- (2) **sigé e u a kàrè**
 bush.DEF to 3s PFT go
 ‘It is to the bush that 3s has gone.’ (1994:468).

For a declarative sentence (without serial verbs or complement clauses), the basic word order seems to be:

⁵ There are four nasal consonants which Carlson treats as phonemic. He says “they are not as well established as some others.” Vowels are automatically nasalized following nasals (not written).

⁶ Other items could include (indirect) objects and adverbs, in that order if co-occurring.

(3) S NEG⁷ AUX DO prefix-V-suffix Other NEG

Not all categories co-occur; this is meant as a general template. Comments and examples are provided in the following:

S: As stated above, items can occur before S, as in example (2).

NEG: Generally the copula that is glossed as NEG is at the left boundary of the verb phrase. However, the persistive AUX translating as ‘still’ (with imperfective V) or ‘again’ (with perfect) or ‘no longer’ can occur before the element glossed as NEG as in (4). (The full verb phrase is indicated by square brackets). See also the examples in §20.7.

- (4) **wà** [sàhà **nyɛ** a **bwɔ̀n**] **li** **nà** **mé**
INDEF [AUX NEG PFT hit] it on NEG
‘One did not again touch it.’⁸

In many tense/aspect forms, the initial NEG at AUX can also be indicated by a floating tone, occurring with AUXs with high tone. The negative occurring with the future AUX illustrates this pattern (see examples in §20.7). The negative generally occurs before the PRG or the PFT or one of the copulas (see examples under Negation). The NEG morpheme at the end of the clause is obligatory.

AUX: Several aspectual AUXs can co-occur as the following examples show, depending on the type of AUX. The tense auxiliaries **ní** ‘Recent Past’ (P₁) and **ná** ‘Remote Past’ (P₂) combine with either the base form of the verb or the perfective form. Combinations of copula verbs with AUXs can create lengthy VPs (see §20.8). Clauses with **m/pyi** in (6) and (7) could be analyzed as clauses with serial verbs. Carlson describes the verb **pyi** ‘do, make, become’ as “an auxiliary in the making”; its exact function needs more investigation: it could be seen as a ‘shifter’, as it moves the time frame back a step. Alternatively, given its meaning, it could be emphasizing the ‘process’ involved. Notice that the maximum number of verbal morphemes appears to be four.

- (5) **kwùŋji** **sàhà** **na** **sí** **ìn-pà**
die.DEF again PRG FUT FP-come
‘Death will come again...’ (1994:346)

- (6) **fyɪŋa** **à** **pyi** **à** **ìnpíí** **sanmpíí** **jò**
python.DEF PFT do>AUX PFT those rest.DEF swallow
‘The python had swallowed the rest of them [chickens]’. (1994:342)

- (7) **pira** **à** **pyi** **na** **múváyɪyi** **bìlì-lì**
3p.EMPH PFT do>AUX PRG tigernut.beds.DEF gather-IPFV
‘They were harvesting the tigernut beds.’ (1994:354)

⁷ What is glossed as NEG is the copula **nyɛ** ‘be’, which is used with PFT or PRG as an indicator of negation early in the sentence.

⁸ The main verb ‘hit’ has the meaning of ‘touch’ in a sentence without DO as the one above.

DO: This position is important in the VP structure: marking is required on the verb in most cases when the DO position is not filled (for details see §20.3). Marking on the verb also obtains when the DO has moved, i.e. fronted to focus position at the beginning of the sentence, as in the following set of examples (where zero symbol [Ø] indicates original position of moved object):

(8) **pi na kuru piŋke pyi ‘bogo’**
 3p PRG this.EMPH drum.DEF call bogo
 ‘They call this drum “bogo”.’ (1994:469)

(9) **kuru piŋke pi nyɛ na Ø m-pyi ‘bogo’**⁹
 this.EMPH drum.DEF 3p be PRG IP.call bogo
 ‘It is this drum which they call “bogo”.’ (1994:469).

V: Many verbs can be used transitively or intransitively, whereby a change in meaning might result (see example (4) and footnote (9)).

Other: The label covers a variety of items, for example objects and adverbs, in that order when co-occurring.

20.3 Verb Structure

The verb template is as follows:

(10) Prefix-root-suffix

20.3.1 Prefix

In initial position, only two prefixes may occur: in Carlson’s terminology IP and FP. The IP (‘intransitive prefix’) is used if the verb is not immediately preceded by its direct object (applies to transitive verbs also). It is a phonologically conditioned toneless nasal, occurring only on verbs with a voiceless stop (**p, t, k** and **tʃ**). Otherwise, there is no form.

The FP (‘future prefix’), a low-weak MID nasal, is used only with an AUX with future time reference (such as the AUX **sí**), and/or irrealis modality, and is not phonologically conditioned. Its segmental support disappears in transitive clauses with direct objects. Low tone remains. The FP survives as tone only where the DO precedes the V. Thus future time reference is doubly marked. These prefixes mark information concerning the preceding DO position on the verb: “[IP] is required by most tense-aspect auxiliaries when they immediately precede the verb” (1994:127). With the TA markers for perfect and Recent Past, the verbs do not require a prefix. Examples of the FP verb prefix follow (see (9) above for the IP prefix):

(11) **ku sí ìm-bò**
 it FUT FP-kill
 ‘It will be killed.’¹⁰ (1994:129)

⁹ When the tense-aspect is present-progressive, the copula (**nyɛ** in this example) is inserted before the aspect. With other aspects in the affirmative this marking is not required.

- (12) **mìl sí** **mu bwón**¹¹
 1s FUT.FP 2s hit
 ‘I’m going to hit you.’ (1994:129)

20.3.2 Root

As indicated above, the verbal root may have the following shapes: CV, CVV, CVCV, CVVCV, or CVCVCV. If the root has no prefix, one may assume that there will be a perfect or Recent Past auxiliary (see examples (2), (4), (6) and (7)).

20.3.3 Suffixes

There are three possible suffixes: imperfective, causative, plural/intensive. The last, which is marked by **-IV**, may be termed a “pluractional”, as it indicates that the same action is performed more than once (by the same actor or different actors). It is not productive -- nor is the causative, which is marked by **-gV**, with a great deal of morphophonemic irregularity and applying only to a small group of verbs (about 20). The imperfective, marked by **-li** and several allomorphs (**-ni**, **-re**, **-ge**) and changes in tone, is productive. Examples follow:

- | | | | | | | |
|------|------|--------------|------------|--------------|-----------------|---------------|
| (13) | base | fágá | ‘grab’ | imperfective | fágá-li | ‘grabbing’ |
| | | cyé-é | ‘be small’ | | cyé-é-gé | ‘being small’ |
| | | yige | ‘take out’ | | yigè | ‘taking out’ |

20.4 Tense, Aspect, Mood (see also §20.6)

Supyire has both tense and aspect. There are two past tenses, both expressed as independent lexical items. There is only one future. All futures, the potential and the subjunctive appear with the ‘future prefix’. In the TAM category, the basic aspectual distinction is one of perfective, the unmarked category, and the imperfective, the latter (as above) morphologically marked by suffixation on the verb. In addition to suffixation, TAM distinctions are achieved by AUXs and serial verb constructions. The present is not marked.

Besides the imperfective, the TAM morphemes are the following (using mostly Carlson’s labels). The information in brackets indicates whether a prefix is required on the verb under certain conditions, and whether the form can co-occur with the perfective, i.e. the basic root, or the imperfective form of the verb. All are exemplified below:

ná	Remote Past (P ₂)	[IP; PFV]
nî	Recent Past (P ₁)	[Ø;PFV]
na	Progressive	[IP;IPFV]
màha	Habitual	[IP;PFV/IPFV]
à	Perfect	[Ø;PFV]
sáhá	Persistent	[IP;PFV] (‘still, again, no longer, not yet’)
sí	Future	[FP;PFV]

¹⁰ The translation in English shows a passive that is not morphologically evident in the original form.

¹¹ Pronouns in declaratives: 1s **mìl**. 1p **wùu**. 2s **mu**, 2p **yìl** (used as pronouns and determiners).

cáá ¹²	Future	[FP;PFV] (no apparent meaning difference)
kú	Potential	[FP;PFV]
bú/bá	Remote	[IP;PFV]
sí	Narrative/Sequential	[IP;PFV]
ká/(a)há	Conditional	[IP;PFV]
sí	Subjunctive	[IP;PFV]
a	Imperfective Subjunctive	[FP;IPFV]
kà/hà	Negative Subjunctive	[FP;PFV]
ta	Imperfective Imperative	[IP;IPFV]

Examples:

- (14) a Imperative (mood) [PFV]

nté kyaàre kwón
 this meat.DEF cut.PFV
 ‘Cut this meat!’ (a small amount of meat to cut)

- b Imperative (mood) [IPFV]

ta nté kyaàre kwùùn¹³
 IMP.IPFV this meat.DEF cut.IPFV
 ‘Cut this meat!’ (a lot of meat to cut)

- (15) Progressive (aspect) [IPFV] (ongoing action with present time reference, or iterative, or on occasion separate events but the “ongoingness” is stressed, also habitual, and, in some cases, Future)

a **u na dùfinimè béé-li**
 she¹⁴ PRG potash evaporate-IPFV
 ‘She is evaporating potash.’ (1994:312)

b **u na pinṅke bwùùn**
 he PRG drum.DEF hit.IPFV
 ‘He is beating the drum.’ (1994:312)

- (16) a Habitual (aspect) [PFV] (a series of habitual events occurring together, generic)

¹² Carlson sees no clear meaning difference between the two future markers, though **sí** is far more common (1994:335).

¹³ When the root is CV, the [l] of the Imperfective **-li** is elided; the suffix vowel, if it is [-front], assimilates (1994:133).

¹⁴ Rather than saying 3s, we have kept the gloss as presented in Carlson, where the gloss gave only he or she; cultural information included would be lost by using numerals.

mu màha yìrì, maá ' fááyì taana a kwùùlò
 2s HAB rise and.NARR rock.DEF line.up SC circle
 'You get up and place the stones round in a circle.' (1994:317)

This form is occasionally used to introduce formal narratives in the first clause. This “Formal Past” usage is perhaps similar to “Once upon a time”...

b Habitual (aspect) [IPFV] (showing duration, simultaneity)

tire màha lè-nì cení í
 3p.EMPH HAB put-IPFV calabash.DEF in
 '...they are put in the calabash'(1994:317)

(17) Remote Past (tense)

u ná m-pá motógi shwɔ à pa
 3s P₂ IP-come motorcycle.DEF buy it come
 'He finally bought a motorcycle and brought it.' (1994:332)

(18) Recent Past (tense) (generally earlier the same day or emotionally closer)

a **mìlì nî mu pyi dì yé**
 1s P₁ 2s tell how Q
 'What did I tell you (earlier today)?' (1994:333)

b **u nî pa**
 3s P₁ come
 '3s came earlier today.'(1994:340)

(19) Perfect (prototypical perfect)

mu a pèè
 2s PFT be.fat
 'You are fat/you have gotten fat.' (1994:340)

(20) Persistives ('still, again, longer, not yet')

a **u sáhá na lyí**
 3s still PRG eat.IPFV
 '3s is still eating.'

b **mu sáhá à pa**
 2s again PFT come
 'You have come again.'

(21) Future

a **pi sí ù bò**
 3p FUT FP.him kill
 ‘They will kill him.’

b **pi sí bá mu bwón**
 3p FUT.FP remote 2s hit
 ‘They will beat you tomorrow (*today).’ (1994:336)

c **mu cáà kapii cè kuru càṅké e**
 2s FUT.FP act.bad know that (EMPH) day.DEF in
 ‘You will know (i.e. experience) a bad deed on that day.’ (1994:336)

d **mì cáá n̄-pà mu wíí**
 1s FUT FP-come 2s look
 ‘I’ll come see you.’ (1994:335)

e **u gú j̄-jà n̄-t̄iri mé**
 3s POT FP-be.able FP-grind NEG
 ‘She wouldn’t be able to grind.’

In sum, we find Supyire to have both tense (Remote Past, Recent Past, Future) and aspect (PFV, IPFV (HAB, PRG), PFT, etc.).

20.5 Serial verbs

Lengthy serial verb constructions (with three or four verbs) are not uncommon though “the most frequent serial constructions have two verbs” (1994:289). Certain aspects are expressed by serial verbs, exemplified in the following four types of constructions, of which the inceptive is the most common (48% of all serials are of this type):

(22) Inceptive (‘come/go’) construction.

a **...mà pà a zàntùṅḡ bwùùn**
 ...and come PRG hyena hit.IPFV
 ...‘and [the bush people] began [past from initial clause] to beat Hyena’

b **u a sà a byànhàrè kànhe na**
 3s PFT go PRG approach.IPFV village.DEF at
 ‘3s was getting near’ (lit: ‘went and was approaching’)
 (**Sa**, a reduced form of **shya** ‘go’, cannot occur by itself.)

(23) Future serial construction

u gú jì-jà n-tìri mé
 she POT FP-be.able FP-grind NEG
 ‘She wouldn’t be able to grind.’ (1994:291)

(24) Subjunctive serial construction

mu ahá bú lyí à kwò ma á
 2s CND eventual eat SC finish you.non-decl SBJ

ná wyéréji wùlà à kàn náhá
 my.non.decl money.DEF take.out SSC give here
 ‘When you finally finish eating, you must take out my money and give it here’.
 (1994:292)

(25) Realis serial construction (occurs with a variety of tense-aspects with past time reference, with habitual and conditional).

kà pi í yí á màrà bagé tòtompé e
 and 3p NAR jump SC cling house.DEF rafters.DEF to
 ‘They jumped and clung to the rafters.’

20.6 Other categories

20.6.1 Voice

There is no morphological passive construction in Supyire. A passive interpretation depends on the thematic role of the NP in subject position and the aktionsart of the verb. Carlson translates intransitive sentences where S has the thematic role of the patient as passives, based on use and function (see example (11)).

20.6.2 Mood

The imperative has both a perfective and an imperfective form (see examples in (14)). The subjunctive also shows the distinction of perfective (**sf**) and imperfective (**a**) and what Carlson calls the “zero subjunctive”. The “zero subjunctive” is found, for example, in sentences such as the following, which is considered more polite than the “bare” imperative:

(26) a **ma taha na fyè e**
 2.ND follow my.ND footprints in
 ‘Follow me (lit. follow in my tracks), please!’

b **ma a ma**
 2.ND SBJ.IPFV come.IPFV
 ‘Come, please!’

For prohibitive sentences, the negative subjunctive (**kà**) is used. In the following example, one of the allomorphs, **hà**, appears:

- (27) **ma hà nì-bwòn li nà mé**
 2.ND PROHIB FP-touch it on NEG
 ‘Don’t touch it!’

The subjunctive is also used in complement clauses:

- (28) **mù à yaa mù í ñ-karé Sukwoo na**
 1s PFT must 1s SBJ IP.go Sikasso at
 ‘I must go to Sikasso.’ (1994:421)

The conditional (auxiliary) is **kà** [IP.PFV]: (1994:375, but see 570ff)

- (29) **téji kà ní-pá ñ-ká**
 tea.DEF CND IP-come IP-boil
 ‘When the tea comes to a boil...’

20.6.3 *Focus*

Supyire marks two main types of focus: contrastive and “marked topic” focus. Both are indicated by moving the focused noun phrase from its ordinary place to initial position in the sentence. Carlson mentions both “strong” and “weak” focus. Here, we discuss only the more common “strong” type.

Three elements mark an affirmative focused construction: fronting, heavy intonational stress and a slight pause before the rest of the utterance (30a); in the negative, a copula or “quasi-copula” appears as in (30b, where **bà** ‘it is not’ fulfils this function):

- (30) a **sigé e u a kàrè**
 bush.DEF to 3s PFT go
 ‘It is to the bush that 3s has gone.’ (1994:468).
- b **sigé e bà u a kàrè mé**
 bush.DEF to AUX 3s PFT go NEG
 ‘It isn’t to the bush that 3s has gone.’ (1994:468).

Carlson indicates (1994:469) that the clause that follows the preposed focused item receives no special marking except in one instance: if the aspect is present progressive (with the AUX **na**), the copula **nye** appears before the auxiliary:

- (26) **ná mu í mù nye na yu**
 with you with 1s be PRG speak.IPFV
 ‘It is with you that I am speaking’

Encoding of a focused direct object is by preposing and the use of the IP prefix (which indicates that the object has been moved from its “typical” position) (32b).

(27) a unfocused direct object

pi na kuru piŋke pyi ‘bogo’
 3p PRG this.EMPH drum.DEF call bogo
 ‘They call this drum “bogo”.’ (1994:469)

b focused direct object

kuru piŋke pi ŋyɛ na Ø m-pyi ‘bogo’
 this.EMPH drum.DEF 3p be PRG IP.call bogo
 ‘It is this drum which they call “bogo”.’ (1994:469).

Adverbs of time, place and manner may be focused:

(33) **wanɪ mi à na vaanyi ta**
 there 1s PFT 1s cloth.DEF find
 ‘It was there that I found my clothes.’ (1994:472)

Apparently, it is not possible in Supyire to focus the verb per se by clefting. Rather, verbal focus is achieved by the use of an exclamatory particle **dé** placed after the verb:

(34) **u a kàrè dé**
 3s PFT go EXCL
 ‘S/he has left!’

20.6.4 *Relatives*

Relative clauses in Supyire are all of the “restrictive” type. The most common method for indicating a relative clause is by preposing it to the main clause. In this sense, Relatives are similar to focus constructions. They differ, however, in that they are “embedded”, in that they follow the pre-posed noun they modify, and must be followed by a clause-final relative marker **ké** (or **gé**):

(35) **yaagé ka a ù bò ké mu a kùrù cé**
 thing.DEF it PFT 3s kill REL 2s PFT it.EMPH know
 ‘You know the thing that killed him.’ (lit: ‘The thing it has killed him, you know it.’)

Coreferentiality is signalled both by a definite pronoun in the main clause and the use of an emphatic pronoun (here, **uru**):

- (36) **pùcwòjí u ɲye ná mu í ke uru sí ɲ-kwû**
 girl.DEF 3s be with 2s with REL 3s.EMPH FUT FP-die
 ‘The girl who is with you will die.’ (lit: ‘The girl she be with you she will die.’
 (1994:489)

20.7 Negation

Negation is marked with an obligatory clause-final negative particle and in most tenses and aspects marking also takes place in the AUX position. The main clause-final marker is **mé**, with **mà** or **màà** “principally used in questions” (1994:377). The negative politeness marker is **mò**.

The two major negative markers that occur in AUX position can be a segmental element **ɲye** (examples (37) and (38), or a floating low tone which occurs to the left of the AUX and docks onto it (examples (39-44). The markers are tense-aspect specific and some types of tense and aspect do not take these markers. In narratives/sequentials negation does not occur, and conditionals demand a very complex structure to express negation (not listed above). Some examples follow:

- (37) **mì ɲye à yaaga ta mé**
 1s NEG PFT thing get NEG
 ‘I didn’t get a thing.’ (1994:379)
- (38) **wùu ɲye na jfna ɲàà mé**
 1p NEG PRG jinn see.IPFV NEG
 ‘We don’t see (a) jinn.’ (1994:379)

Low tone is used with auxiliaries that express TA marking and are high-toned without negation, such as future markers **sì**, **càà**, Remote Past **nà**, Recent Past **nì**, ‘still, yet’ **sàhá**, ‘be here’ **náhá**, ‘be there’ **wá**:

- (39) **yi sì ɲ-jà ùrù jyìle mé**
 3p NEG.FUT FP-be.able it.EMPH cross NEG
 ‘They (the bush cows) won’t be able to cross it (the river).’ (1994:381)
- (40) **waráɲi sijéréɲi nà fyìlɲna à**
 Wara.DEF celebration.DEF NEG.P₂ cancel NEG.Q
 ‘Wasn’t the celebration of the Wara cancelled?’¹⁵
- (41) **u nì pà mé**
 3s NEG.P₁ come NEG
 ‘He didn’t come (earlier today).’

¹⁵ See Carlson (1994:726) for cultural information concerning the “Wara”.

- (42) **wùù sàhá sá à nɔ à**
 1p NEG.yet go SC arrive NEG.Q
 ‘Haven’t we arrived yet?’
- (43) **mì sáhá nye à ɲɛna à jwo mé**
 1s still NEG PFT agree SC say NEG
 ‘I didn’t any longer try (agree) to speak.’
- (44) **u nàhá náhá mɛ**
 3s NEG.be.here here NEG
 ‘3s isn’t here.’ (1994:382)

There is no marking at all with certain auxiliaries: HAB (**màha**), what Carlson calls Potential (**kú**), and Past (**mpyi**). Clauses with these markers contain presupposed information.

20.8 Auxiliaries

20.8.1 ‘Be’ auxiliaries

There are five verbs which are used as copulas, two of which have other functions. According to Carlson, all of these verbs are highly grammaticalized as AUXs. They are **nye** ‘be’, **pyi/mpyi** ‘do, belong’, used in the non-present forms, **sii** (emphatic) from the verb meaning ‘begin’, **náhá** ‘be here’, and **wá** ‘be there’. Only the progressive auxiliary can be used with **nye**. **Mpyi** is used to indicate past, while **pyi** is also used in other tense-aspects. Examples:

- (45) **kuru bà na nye kàn-bwòhò**
 that .EMPH even PRG be village.big
 ‘That even is a big village.’
- (46) **ku sí n̄-pyì wùù á silege**
 it FUT FP.be us to shame
 ‘It will be a shameful thing for us.’
- (47) **kàshì a s̄ì ya-pege d̄è**
 war PFT be.EMPH thing-bad EXCL
 ‘War is a really bad thing!’

The last two copulas include deictic information for **náhá** (see (44)). Their use with predicate nominals is relatively rare.

20.8.2 Other TAM auxiliaries

Most of the auxiliaries that mark various tense, aspect and mood categories have transparent etymologies, many from verbs. These include inceptive aspect marker **pa**, from the verb **pa** ‘to come’, habitual AUX **màha**, from a verb **màhànà** ‘to go around in circles’, future marker **cáá** from a productive verb **cáá** ‘to want’ and future AUX **sí**, a reduced form of **shya** ‘to go’.

Progressive AUX **na** is related to the preposition **na** ‘at’ or ‘on’; Persistentive **sáhá** is identical to an adverb meaning ‘still’, ‘not yet’.

21

Yoruba

(West Benue-Congo)

John Hewson

21.1 General

Yoruba is spoken mainly in west and southwest Nigeria, and has a long linguistic tradition, dating from an early grammar by Crowther (1852). It has some 20 million native speakers, mostly in Nigeria, but also including a million or so in Togo and Benin. The language has many dialects, and also some two million second language speakers who use it as a lingua franca.

This language is remarkable for its simplicity and its complexity. The early grammars (e.g. Ward 1952, Rowlands 1969) are very comprehensive, and the later accounts to which we have had access for information on the verb phrase (Bamgboṣe 1966, 1967 Awobuluyi 1978, 1982, Afḡlayan 1982, Odunaga 1982, Oke 1982), open up further possibilities by offering interesting new insights, analyses, and discussions.

Traditional orthography writes open mid vowels with a subscript dot, that is also used with *s* to represent an /ʃ/ which is pronounced fortis with the lips spread. It should also be noted that since there is no /kp/ vs /p/ contrast (to parallel /gb/ vs /b/), the spelling *p* represents phonological /kp/. All single vowels are to be regarded as short, and vowel length is represented by doubling the vowel, which simplifies tone marking. The seven-vowel system (phonetic value in brackets) is as follows:

i [i]	u [u]
e [e]	o [o]
ɛ [ɛ]	ɔ [ɔ]
a	

Acute accent represents a high tone, no accent a mid tone, and grave accent a low tone. Final syllables may be marked for one of two different kinds of modified tone that mark elision of earlier tones: **lódé** 'outside', **lánǎ** 'yesterday'.

Final vowels of verbs and nouns may be lengthened to show syntactic relationships. For verbs this is used, for example, to mark the initial verb of a serial verb construction. On nouns it is used for marking possessive constructions. The noun so marked is the possessee of the noun that follows it: **ilé** 'house', but **ilée Bísí** 'Bisi's house'.

21.2 Word order

Yoruba is strictly SVO, and the 3s object simply copies the vowel of the preceding verb, an iconic representation of the extension or completion of the verbal activity, as in (1).

- (1) **ó fà á** 'He pulled it.' **ó ṣí í** 'He opened it.'

The other persons have distinct subject and object pronouns, used only with verbs. There is also a set of emphatic pronouns whose usage is not restricted. The declension of these is illustrated in Table 21.1 (where V = vowel of the verb is copied), and the usage of S and O pronouns in (2).

Table 21.1 Personal pronouns in Yoruba

Subject	Object	Emphatic
1s mo	1s mi	1s èmi
2s o	2s o/ẹ	2s ìwọ
3s ó	3s V	3s òun
1p a	1p wa	1p àwa
2p ẹ	2p nyin	2p ènyin
3p nwọn	3p wọn	3p àwọn

Notes:

1. Yoruba syllables are strictly (C)V, and have no consonant clusters. Spellings with **-Vn**, where **n** appears in syllable final position, consequently represent nasal vowels, not final consonants. Where syllabic **n** occurs independently, it functions as V.
2. The vowels /a, o/ are also nasalized after a nasal consonant: the pronunciation of **mo** is [mõ].
3. The 2 singular variation **o/ẹ** represents dialectal differences.
4. The form **nwọn** is an arbitrary spelling for **wọn** to distinguish it from **wọn** ‘be dear’.
5. There is no distinction of gender in any of the persons, nor of inclusive vs. exclusive in the 1st person plural.

- (2) a **mo rí nyín** ‘I saw you-all.’ **ẹ rí mi** ‘You-all saw me.’
 b **mo lù Òjó** ‘I hit Ojo.’ **Òjó lù mi** ‘Ojo hit me.’
 c **Táiwò rà á** ‘Taiwo bought it.’

The fixed word ordering is not altered for questions or negatives or other expressive elements, these being marked with a variety of particles, as in (3):

- (3) **ó tí lọ** ‘He has gone.’ **ó tí ìlọ** ‘Has he gone yet?’ **kò ití ìlọ** ‘He hasn’t gone yet.’

As noted, Yoruba is SVO with both nouns and pronouns: **ó lù Òjó** ‘He hit Ojo.’; **ó lù mi** ‘He hit me.’ If there is a second object it will be preceded by **ní** ‘have, say’ (4a), which becomes **I**’ before vowels (4b). If both objects are pronominal, the second will be an emphatic pronoun (4c):

- (4) a **ó kọ wa ní Yorùbá**
 3s teach us have Yoruba
 ‘He taught us Yoruba.’
- b **ó fún mi l’ówó**
 3s give me have’money
 ‘He gave me money.’

This construction is of quite high frequency because of its use in idioms: **ó fà mí l’etí** ‘He gave me a hint.’ (= ‘he pulled me have ear’) and in two verb constructions **ó jí mi l’ówó gbé** ‘He stole my money.’ (= ‘he stole me have money take’).

Yoruba has no grammatical plural in the noun, using the 3rd person plural emphatic pronoun **àwọ̀n** instead to create plural reference, as in (5)

- (5) a **àwọ̀n ẹyẹ ní fò**
 3p bird PRG fly
 ‘Birds fly.’
- b **mo rí àwọ̀n ìjòyè**
 1s see 3p chief
 ‘I saw the chiefs.’

Sometimes either form can be used with a slight difference of meaning, as in (6).

- (6) a **ìwé mi dà**
 book my where?
 ‘Where is(are) my book(s)?’
- b **àwọ̀n ìwé mi dà**
 3p book my where?
 ‘Where are my various books?’

21.3 Verbal Structure

Modifiers follow their heads, and adverbial elements are introduced either immediately before the verb, or after the object (after the verb if there is no object). Yoruba has no inflectional subject markers or object markers, and no personal inflections or other grammatical extensions of the verb. Lexical compounding of various kinds is quite frequent however. Typologically Yoruba is strongly analytic in (a) its lack of morphology, (b) its lexical compounding, (c) its use of separate grammatical markers for noun plurality, (d) its lack of grammatical gender, (e) its strictly configurational syntax, and (f) its use of tone to mark grammatical functions.

21.4 Tensed verbs with Performative, Progressive, and Perfect

Verbs that are finite, requiring an explicit subject, lack all tense contrasts, and are consequently representations of the Vast Present. The simple unmarked form of the verb represents a complete event or a state of affairs that can be anywhere in the temporal experience of the speaker, its location as past, present, or future being determined by Aktionsart (inherent lexical aspect), aspect (auxiliaries), and context, especially with such adverbs as **lóní** ‘today’ and **lánǎ** ‘yesterday’, etc.

Since these forms are simple lexical items with no mark for aspect, they represent the default aspect, which is Performative. There is, as a result, a corresponding marked Progressive. The paradigmatic forms for these two conjugations are presented in (7). The verb is **lọ** ‘go’. The Progressive marker **ń** is probably related to the verb **ń** ‘have’ (see Heine and Kuteva (2002:83) for the common grammaticalization of ‘have’ verbs to markers of Progressive aspect).

(7)	PERFORMATIVE		PROGRESSIVE
	mo lọ	1s go, went	mo ń lọ 1s am, was going
	o lọ	2s go, went	o ń lọ 2s are, were going
	ó lọ	3s goes, went	ó ń lọ 3s is, was going
	a lọ	1p go, went	a ń lọ 1p are, were going
	ẹ lọ	2p go, went	ẹ ń lọ 2p are, were going
	nwọn lọ	3p go, went	nwọn ń lọ 3p are, were going

Before velar consonants the nasal element is also velarized, as in (8), with **wá** ‘come’.

(8)	mo wá	1s come, came	mo ńg wá	1s am, was coming
	o wá	2s come, came	o ńg wá	2s are, were coming
	ó wá	3s comes, came	ó ńg wá	3s is, was coming
	a wá	1p come, came	a ńg wá	1p are, were coming
	ẹ wá	2p come, came	ẹ ńg wá	2p are, were coming
	nwọn wá	3p come, came	nwọn ńg wá	3p are, were coming

It is normal for the Progressive form of the Vast Present to represent generic statements or universal truths, as in (9):

(9)	a	oòrùn ń	ràn			
		sun	PRG	shine		
		‘The sun shines.’				
	b	ayé	ń	yí	oòrùn po	
		Earth	PRG	turn	sun	round
		‘The earth rotates around the sun.’				

The forms of the Perfect with auxiliary **tí** are listed in (10):

(10)	mo ti lq	1s have gone	mo ti wá	1s have come
	o ti lq	2s have gone	o ti wá	2s have come
	ó ti lq	3s have gone	ó ti wá	3s has come
	a ti lq	1p have gone	a ti wá	1p have come
	ẹ ti lq	2p have gone	ẹ ti wá	2p have come
	nwọn ti lq	3p have gone	nwọn ti wá	3p have come

The **ti** particle has a variety of uses. Rowlands (1969:274) glosses it as three separate items, as follows: (i) property of, matter of; (ii) to come from; (iii) already, now (preceding verbs). These are all variant meanings of a single item with a meaning of 'source' (note 'of' in (i), 'from' in (ii), and in (iii) 'already' with the sense of 'after, result, from', representation of a resultant state which is the core meaning of an ordinary perfect). Heine and Kuteva, in fact, in their *World Lexicon of Grammaticalization* note that such items may be used for representing the Near Past, and mention explicitly Yoruba **ti** and French *venir de* 'to come from' as accomplishing this function (2002:73).

Just as French *de*, English *of* are used to indicate possession, the particle **ti** is used with the unemphatic object pronouns, as in (11), to create possessive forms of the personal pronouns.

(11)	1s	tèmi	mine	1p	tiwa	ours
	2s	tîrẹ, tiẹ	yours	2p	tinyín	yours
	3s	tîrẹ, tiẹ	his/hers/its	3p	tiwọn	theirs

There is also a Progressive form of the Perfect, as listed in (12):

(12)	mo ti n lq	1s have been going	mo ti n wá	1s have been coming
	o ti n lq	2s have been going	o ti n wá	2s have been coming
	ó ti n lq	2s has been going	ó ti n wá	3s has been coming
	a ti n lq	1p have been going	a ti n wá	1p have been coming
	ẹ ti n lq	2p have been going	ẹ ti n wá	2p have been coming
	nwọn ti n lq	3p have been going	nwọn ti n wá	3p have been coming

Here both **ti** and **n** markers are combined to give a representation of a continuous activity seen retrospectively; the usage indicates the significant beginning of something some time back. Odunuga (1982:271) gives the examples presented in (13):

(13)	a	mo ti n gba létà rẹ
		1s PRF PRG receive letter your
		'I have started to receive your letters.'
	b	àwa ti n ṣiṣẹ
		1p PRF PRG work
		'We have started to work.'

21.4 Auxiliaries

21.5.1 Existential auxiliaries/copula verbs

It is appropriate to introduce at this point the different verbs ‘to be’, since one of these, **wà**, is always found in the unmarked aspect. Another **bẹ**, is only used as a Progressive, **míbẹ**, with the nasal prefix. These verbs are exemplars of the frequent contrast found elsewhere between permanent and temporary being, although in Yoruba their usage overlaps to a considerable degree, and varies regionally.

There is also another pair of verbs, **jé** and **şe**, that are used for description, **jé** for the more permanent characteristics, and **şe** for the more temporary characteristics, especially when it is preceded by **ń** as in (14). The normal negative is also with **şe** rather than **jé**.

- (14) a **òyìnbó** **l’ó** **jé**
European it.is=3s be
‘S/he is a European.’
- b **mo** **şe** **káfintà** **rí**
1s be carpenter formerly
‘I was once/have been a carpenter.’
- c. **akò wé** **ni** **mo** **ń-şe** **nísìsiyĩ**
clerk it.is 1s PRG-be now
‘I am now a clerk.’
- d **kò** **ń-şe** **òyìnbó**
not.is PRG-be European
‘S/he is not a European.’

21.5.2 Use of copula *ni*

The copula **ni** in some ways parallels the usage of **kò** (see example (14d) and §21.8 on Negatives): (i) it is never preceded by the third person subject pronoun **ó**; (ii) likewise, contextual tone raising of noun subjects never occurs before **kò** or **ni**; (iii) if a subject pronoun is used, emphatic pronouns are required before these words.

21.6 Expressing past and present

The Aktionsart, the lexical aspect, is a major factor in the temporal interpretation of verbs in the Vast Present, which have no tense distinctions, the finite forms of the verb in Yoruba representing the whole of time as one undivided whole. Lexical items that depict complete actions such as ‘give, take, jump, arrive’, etc, normally represent memorial

time, since whatever is materially complete in the whole of time necessarily belongs to what in English would be considered past, since future events remain imaginary, and have no materiality. States, on the other hand, such as ‘exist, be white, be asleep, know’, etc, since the activity does not change from moment to moment, normally represent the ongoing present in Yoruba, which would be non-past in English, as in (15).

(15)	Actions	a	mo	lq	s’ Eko
			1s	go	to Lagos
					‘I went to Lagos.’
		b	ó	pa	ekun
			3s	kill	leopard
					‘He killed a leopard.’
	States	a	ó	mò	mi
			3s	know	me
					‘S/he knows me.’
		b	ó	sùn	
			3s	sleep	
					‘S/he is asleep.’

The simple forms of verbs representing temporary states such as ‘sleep, stand, sit’, etc, which begin with an inceptive action (e.g. ‘going to sleep’), may be ambiguous between the inceptive meaning as an English past tense, and the stative meaning of an English present tense. In short, **ó sùn** may mean either ‘He fell asleep’ or ‘He is asleep’.

21.6.1 *Future with particle y(i)ó (Prospective aspect).*

This future uses the same unemphatic subject pronouns as are used with the negative marker **kó** (see §21.8 on Negatives): **mo** becomes [ŋ] before the velar; 3s is reduced to zero; and **nwɔn** becomes neutral tone, the 3rd person subject also being omitted. (These appear to be adjustments to the representation of non-experiential time, shared by both negative and future).

Colloquially, and in some regions, an alternative future marker **á** is used. The form **y(i)ó** is quoted in various forms. Rowlands comments (1969:92): “the situation is complicated by the existence of alternative dialectal forms”, and goes on to discuss tonal differences. He then notes that the **y** is pronounced “energetically” and that the “word could actually be spelt more simply **yó**”, which is the way that Bamgboş e (1966:69) records it, and the way that we have chosen to record it here. We note, however, that Awobuluyi (1978:71) and O kẹ (1982:248) both spell it **yód**, which may be a dialectal variation.

(16) PROSPECTIVE

ng ó lq	1s will go	ng ó wá	1s will come
o ó lq	2s will go	o ó wá	2s will come
yó lq	3s will go	yó wá	3s will come
a ó lq	1p will go	a ó wá	1p will come
ẹ ó lq	2p will go	ẹ ó wá	2p will come
nwón ó lq	3p will go	nwón ó wá	3p will come

21.6.2 The particle *máa*

There is also a particle **máa** which marks actions as inceptive, progressive, or iterative. It is often found with futures, but is sometimes just an intensifier. The expression **máa lq**, for example, may mean ‘Get going, be on your way!’ or ‘Keep going!’, the latter being iterative when used with such adverbial elements as **lójoojúmó** ‘everyday’.

21.6.3 Combinations of aspect markers

Odunuga, writing on tense and aspect in Yoruba, states (1982:266) that **ń** (Progressive), **ti** (Perfect), **máa** (Inceptive) and **yó, á** (Prospective) form a single class. As we have seen above (example (12)), certain combinations of these aspectual markers are possible. These markers always appear in the order **á/yó - ti - máa - ń**. The permissible combinations listed by Odunuga are presented in (17):

(17)	Double combinations	Triple combinations
	ti ń	ti máa ń
	máa ń	á ti máa
	yó ti	yó ti máa
	yó máa	
	á máa	

Examples of compound aspectual forms reported by Odunuga (1982:270ff) are presented in (18-20). Although **máa** by itself, as an Inceptive, may have a future meaning, with the Progressive it may indicate continuity, and with a past adverb even represent the past.

(18)	a	mo	máa	lq	
		1s	INCE	go	
		‘I	shall	go.	
	b	mo	máa	ń	rí i
		1s	INCE	PRG	see him
		‘I	always	see	him.’

c **àwa máa ñ kí i rí**
 1p INCE PRG greet him formerly
 ‘We used to greet him.’

With the Prospective, **máa** here indicates continuity, and likewise with the Perfect Progressive indicates a continuous state that existed in the past but no longer exists. It is normal for inceptives to mark continuity: the Aktionsart of the verb ‘to continue’ is just as inceptive as that of the verb ‘to start’. The lexical notion of continuity is inceptive by its very nature, as may be seen by the parallelism of the English imperatives ‘Start doing it!’ and ‘Keep doing it!’

(19) a **ìwọ yó máa rí i**
 2p PROS INCE see him
 ‘You will be seeing him.’

b **mo ti máa ñ jẹ un níbẹ**
 1s PFT INCE PRG eat there
 ‘I used to eat there.’

The other triple forms **á ti máa** and **yó ti máa** represent future events that will have already started, as in ‘When we get home you will be sleeping, will have fallen asleep’. Similar results obtain for **yó ti máa** which appears to indicate a future state of affairs where an action with a long duration has already begun.

(20) a **ìwọ á ti máa sùn**
 2p PROS PFT INCE sleep
 ‘You will have fallen asleep.’

b **èmi yó ti máa kǹlé**
 1s.EMPH PROS PFT INCE build.house
 ‘I will be building a house.’

The meaning here appears to be ‘I will have started building a house’, in other words the building of the house will be in progress.

21.7 Modal forms

21.8 Negatives

There is a binary negative contrast in Yoruba: particle **kò** appears in main clauses, **má** in prohibitions and subordinate clauses.

21.8.1 Negative particle *kò*

With the negative particle **kò** some subject pronouns have the same forms that are found with the future: **mo** becomes [ŋ] before the velar; 3s is reduced to zero; and **nwɔn** becomes neutral tone, as in (21):

(21) **ng kò mò** ‘I do not know.’; **kò mò** ‘He does not know.’; **nwɔn kò mò** ‘We do not know.’

The negative particle **kò** is also subject to vowel copying in allegro speech, where one hears **a kò mò** as **aà mò** ‘we do not know’ and **ɛ kò mò** as **ɛɛ mò**. In these examples, the negative marker **kò** is reduced to V. It also has a variant form **kí** which is found only before the Future marker **yó, ó**, the Progressive marker **ń**, and the modal marker **ibá** ‘would, should, could have’.

21.8.2 Prohibitive particle *má*

Prohibitions are expressed by placing **má** in front of the verb: **má rà á** ‘Don’t buy it!’ with modifications to high and mid tones in the following syllable. The particle **má** is also used in subordinate clauses, as in the contrastive pair in (22 a. and b.):

- (22) a **mo ní kí o má kà á**
 1s tell that you not read it
 ‘I told you not to read it.’
- b **mo kò ní kí o kà á**
 1s not tell that you read it
 ‘I did not tell you to read it.’

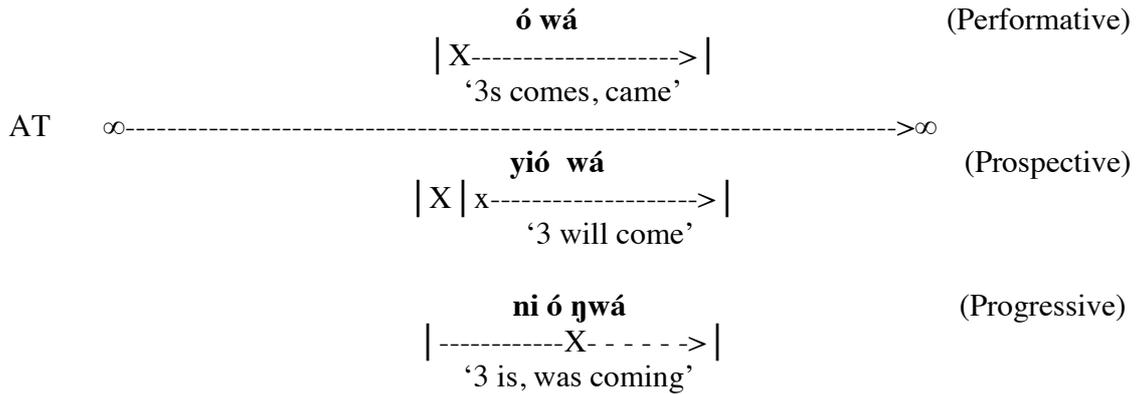
21.9 Conclusion

The unmarked finite forms of the verb represent complete events or continuing states; they are examples of Performative aspect. There is a corresponding Progressive marked by **ń**, a Perfect marked by **tí**, a Prospective marked by **yíó** or **á**, and an Inceptive marked by **máa**. Combinations of these five markers are also used.

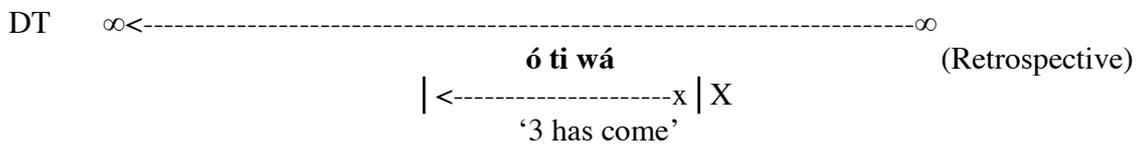
Suggestions have occasionally made by some of the writers that what we have called the Prospective Aspect could be called a future tense. This appears doubtful for a variety of reasons: (i) there is no other indication of any kind of tense; (ii) the other four markers of this class obviously mark aspect; (iii) it is frequent in the languages of the world for the future to be marked aspectually; (iv) there are two very similar markers of the Prospective (**yó, á**), which appear to be slightly different in usage, which is normal for aspect or focus markers, but not for tense markers.

21.10 Diagrammatic Representations

(i) Forms in Ascending Time



(ii) Forms in Descending Time



1. This is a very spare system: there is no basic form in Descending Time, and consequently no contrast between Imperfective and Progressive.

22

Zande

(Ubangi)

John Hewson

22.1 General

Zande is spoken in the far north of Orientale Province in the Democratic Republic of the Congo, and also in the southern Sudan and the Central African Republic. It forms a long semi-circle, based on the River Uele, with most speakers in the DRC. It is reported as being of a remarkable uniformity throughout the whole region (Tucker and Hackett 1959:109). It is also an important trade language, spoken not only by native speakers but also by large numbers of bilinguals in the same three countries. The total number of speakers is estimated at 1,142,000.

The language has eight vowel phonemes, using the following symbols (Tucker and Hackett 1959:21): / ɨ, i, e, ə, a, o, u, ʊ /. Vowels that are heard long are probably disyllabic, from the evidence of tones and of the contraction of short vowels in juxtaposition (Tucker and Hackett 1959:25). Boyd sometimes differs from Tucker and Hackett in representing the vowel length of the pre-stem markers. Readers should be aware that the two sources also represent tones differently. Tucker and Hackett (1959:50) say Zande appears to have three tones but really has only two, the mid-tone being only a “variant” of the high. We therefore mark their high and mid as high (´), and leave the low unmarked. Boyd, on the other hand, represents three tones, high (acute accent), mid (macron), low (grave accent). It is also possible that differences in tonal transcription may reflect dialect differences in Zande. There are nasal vowels, indicated in the spelling by an <n> in syllable final position.

There are prenasalized plosives [mb, nd, nj, ŋg, nz, nv, ny, ngb] typical of the whole Niger-Congo spectrum, and also the plosives /kp, gb/ with double articulation that are typical of the West African region. There are also minimal pairs with ɛ̃/r, which suggest that ɛ̃, which is accompanied by nasalization, may be a surface form of /mr/.

22.2 Word Order

The canonical word order is S V O Other as in (1), except that in certain circumstances subject inversion may occur in subordinate clauses. Nothing can intervene between the subject and the verb with its pre-stem markers. Subject markers are required by all verbs, including imperatives, except the infinitive, which is preceded by pre-stem marker **kà-**, as in (1)¹.

- (1) **mì-ná-ídà** **kà-kpára** **pásyó**
 1s-PM-want.IS to-divide.IPFV meat
 ‘I want to divide the meat.’

¹Abbreviations unique to this chapter include: PM = pre-stem marker, INT = Intensive (Boyd’s term).

22.3 Verb description and structure

22.3.1 The two verb classes

There are two classes of disyllabic verbs, with different tonal patterns: Class 1 H-H and Class 2 H-M; all monosyllabic verbs have H tone: **rí** ‘eat’, **ndú** ‘go’. Minimal pairs, representing the two contrastive classes, are quite common:

- (2) Class 1 **kpárá** ‘divide’ (h)ímá² ‘stay’ **zúngá** ‘swear’ **zíá** ‘be pure’
 Class 2 **kpára** ‘weep’ (h)íma ‘suffer’ **zúnga** ‘join’ **zjà** ‘seize’

There are also two grammatical variants of every verb: a basic or “infinitive” stem, and a “perfect” stem (Tucker and Hackett 1959:50), labelled *inaccompli* “Incompletive” and *accompli* “Completive” by Boyd (1995:165-6). Monosyllabic and Class 1 verbs do not change in forming the “perfect stem”. Class 2 verbs, however, add a high tone suffix showing vowel copying of the root vowel, when these are high and mid. When the root vowel is /a/, the suffix is /í/ (with /ú/ after labial consonants) as in (3).

Of these two stems the Incompletive is the unmarked form, and in what follows we refer to it as an Imperfective. The Completive will also be referred to as a Performative, as its usage (examples (7)-(10) below) shows it to be.

- | | | |
|-----|------------------------|--------------------------|
| (3) | Imperfective | Performative |
| | bíta ‘climb’ | bítí ‘climbed’ |
| | zúnga ‘join’ | zúngú ‘joined’ |
| | ngéra ‘look at’ | ngéré ‘looked at’ |
| | óra ‘flee’ | óró ‘fled’ |
| | pása ‘cook’ | pásí ‘cooked’ |
| | sápa ‘share’ | sápú ‘shared’ |

The distribution here suggests that /í/ may be the reflex of a suffix that originally replaced Final Vowel /-a/ in Class 2 verbs, and then underwent vowel harmony with high and mid vowels, and velar assimilation to preceding labials.

This picture is complicated by the fact that there are many derivations formed by compounding, and most verbs can take certain common derivational suffixes (Extensions).³ The derived form does not necessarily belong to the same class as the original stem, as the new accentual pattern shows. Tucker and Hackett (1959:60) give the following example of derivations from /fú/ “speak” which, as a monosyllable, belongs to Class 1, but in derived forms follows the class of the derivational suffix, which then forms frequentatives on a different pattern.

² [h] is not phonemic, but may be used epenthetically to separate vowels.

³ Although the sources mention several extensions (Causal, Neutral, Intensive, Frequentative, Pluractional, etc.), only the following are really illustrated: Causative (-**si** with Class 1, -**sa** with Class 2), Transitive (-**di** Class 1, -**da** Class 2), -**pa** Frequentative, -**rá** Pluractional. As seen in (4), Frequentative can also be represented by reduplication. Boyd also has -**nga** ‘Emphatic’.

(4)	Basic stem		Frequentative	
	fú	speak	fúka	Class 2
	fúda	excite	fúfuda	Class 2
	fúga	warn	fúfuga	Class 2
	fúrá	chat	fúfúrá	Class 1

Monosyllabic **fú** becomes a Class 2 verb when the frequentative suffix /-ka/ is used to create the frequentative form **fúka**, but a Class 1 verb with the pluractional suffix /-rá/.

22.3.2 *Verbal paradigms*

The following paradigms show the verb **pása** “to cook” in both its Imperfective (unmarked) and Performative (marked) paradigms.

(5)	Imperfective		Performative	
	mì pás-a	‘I cook’	mì pás-ì	‘I cooked’
	mò pás-a	‘you cook’	mò pás-ì	‘you cooked’
	ù pás-a	‘3s cooks	ù pás-ì	‘3s cooked’
	àni pás-a	‘We cook’	àni pás-ì	‘we cooked’
	àni pás-a	‘you cook’	àni pás-ì	‘you cooked’
	àmí pás-a	‘they cook’	àmí pás-ì	‘they cooked’

As well as the 3s **ù** and 3p **àmí** (non-human), the following pronouns are used for humans: Masculine **kō**, Feminine **rì**, Indef **nì**, with 3pl **ì**.

22.3.3 *Verb Structure*

The structure of the verb may be outlined as follows:

(6) SM (-) TAM - ROOT - (EXT) – FV - OM

The root is the beginning of the Stem which ends with FV. Tense is marked tonally at TAM, and there are some aspect and mood markers in this position, but there are also many adverbial and discourse elements in pre-stem position: Tucker and Hackett (1959:63-70) list twenty-four pre-stem affirmatives, plus two Subjunctive and six Negative forms. Boyd has a shorter list, with only sixteen, of which six are said to be infrequent.⁴

⁴Tucker and Hackett’s twenty-four include five relatives, about which Boyd says that virtually all absolutes can also occur as relatives, so Tucker and Hackett’s distinction between absolute and relative may be artificial. Because it is longer and probably more inclusive, we give Tucker’s list here (although Tucker and Hackett admit to having omitted several forms they found in earlier sources). Readers should keep in mind that the morphemes in this list may not correspond exactly to what Boyd shows in our text, because the two authors sometimes differ in their labeling and their representation of vowel length and tone:

22.3.4 *The two different verb stems*

The Imperfective stem is used for the representation of incomplete events, but is never used without a pre-stem marker, the most common being **na**. The Performative stem, on the other hand, is frequently used without pre-stem markers to represent past events, as in (7) and (8) below, except with stative verbs, where it represents the ongoing present, as in examples (9) and (10), the typical distribution of meanings of a Performative (examples from Boyd 1995:169).

This situation leads to an unusual clash of marked and unmarked forms. Morphologically, the Performative is the marked form, since it adds a suffix that the Imperfective does not have, but this affects only Class 2 verbs; it does not affect Class 1 verbs or monosyllables. It appears that in order to distinguish Imperfective from Performative elsewhere than Class 2 the pre-stem marker **na** is used with the Imperfective stem, which thus becomes a marked form. The Performative, by contrast, is frequently found without any pre-stem marker.

Since the Performative stem is the form on which tones may change according to context, this form when used alone without a pre-stem marker is found with mid tone format. It is one of the most frequent forms of the language, and is used to represent events just completed as in (7) and (8), or ongoing states as in (9) and (10)⁵.

(7) **ì yāmbù-rò ngbángà yó, mó 'yá**
 3p call.PFM-2s tribunal.LOC LOC 2s come.SBJ
 ‘Come, you’re summoned to the tribunal.’

(8) **mì òjìn gā-kò ngbáyá**
 1s steal.PFM of-him maize
 ‘I stole his maize.’

(9) **ì sōgō à-bòrò' àné gbè**
 3p hate.PFM 3p-people here much
 ‘They are very nasty to people here.’

With the IPFV FV:

Absolutives: -ná- IPFV, -ní-tá- ‘Present subordinate’, -áá/-aá- ‘Future HAB’, -ní-ná- HAB, -a/-á- ‘Future’, -ní-káá- IMM FUT, -ná-náá- Past HAB, -náá- IMM Past PRG, -áá- Past PRG, -áá-tá- Past PRG subordinate, -á- Pres Indef (how different from HAB?), -áá-náá- Past HAB PRG.

Relatives: -náá- REL Past PRG, -náá-náá- REL Past HAB.

With PFM FV:

Absolutives: Ø Present PFT, -ní- “always”, -a-ní- IMM FUT, -á- Past, -ní- IMM Past, - ná- “Pluperfect”, - áá-ní- Pluperfect PRG.

Relatives: -ní- REL Recent Past, -náá/-náa- REL Past, -náá-ní- REL Past HAB.

⁵ It will be noted that there are differences between French and English transcription practices. Tucker and Hackett use hyphens where Boyd uses periods, and he hyphenates the subject to the verb. Boyd follows the usual French and Belgian practice of separating the subject from the other verbal elements. There is a certain justification for doing this in that pre-stem elements are usually dependent on the verb, whereas the verb is dependent on its subject; the slight difference of transcription for the PMs and the subject underline this difference.

- (10) ànì ìnī-rì à.ɲà
 2p know.PFM-her INT.know
 ‘You know her well.’

Boyd uses a present tense in the French translation of (7): *on t’appelle au tribunal* ‘they are calling you to the tribunal’, but it could, in fact be interpreted as a past event: ‘They’ve called you to the tribunal’. It certainly represents an event that has already taken place. Example (8) is clearly a past reference, whereas (9) is equally clearly present, but a generic present, a stative, a usage that is impossible for a Perfective. Because of this apparent discrepancy, Boyd comments (1995:169): “Cette forme très fréquente exprime le sens absolu du verbe, sans précision temporelle ni aspectuelle”. (‘This very frequent form expresses the absolute sense of the verb, without any precise tense or aspect’).

It is this distribution of meanings (past completive with present stative) which shows that the completive stem of Zande is a Performative (Welmers’ (1973:345-6) “Factative”), which in this language is a marked form morphologically, but the unmarked form when used without a pre-stem marker, as noted above. The use of the Performative with the verbs ‘to hate’ in (9) and ‘to know’ in (10) puts the issue of its status beyond doubt: such usage is not possible with Perfectives, but is normal everyday usage with Performatives.

These two major Zande aspectual forms, markers of an important aspectual contrast (Imperfective vs. Performative), are not marked for tense in (7)-(10), but as finite forms with a personal subject marker, they are exponents of the Vast Present, the single universal tense that is a typical element of Niger-Congo languages.

22.4 The pre-stem markers

The numerous pre-stem markers of Zande, which operate in a position which in other Niger-Congo languages is typically used to mark tense and aspect, mostly appear to be discourse particles and other adverbial markers, that indicate, for example, the clausal status of the verb, such as whether it is relative or consecutive, and whether the action is contemporaneous, about to take place, or habitual.

Tucker and Hackett (1959:62ff) list 24 of these pre-stem markers (see footnote 4), with several instances of two markers in this position, and he also gives the names used by Gore and Lagae to describe the function of these forms, but the use of such a long atomistic list is simply confusing. Boyd points out that part of the reason for this lack of clarity is the addition of syntactic markers, such as those which mark subordination or other relationships. He reduces it to a list of 15, which includes markers of modality. He then divides them into two categories which he labels Definite and Indefinite, on the basis of a purely formal distinction. Indefinite includes all verbal constructions with any pre-stem marker of the form /n-V/, and Definite any construction where the only prefix is /á-/ , the tones on the prefixes being determined by other criteria.

22.4.1 Pre-stem marker *ná* (Imperfective)⁶

One pre-stem marker of great frequency is /ná-/, which is used all the time with the Imperfective stem, and seems to have been considered by Tucker and Hackett as an Imperfective marker. Boyd, however, notes that “this form expresses a presumption”: its use depends on the discourse context which provides the sources of the consequences of this presumption. It is only used with the Imperfective stem, which in turn is never used without a pre-stem marker, but it adds to the context, and does not mark the Imperfective sense which is inherent to the Imperfective stem. It regularly occurs, for example, in the main clause after a conditional subordinate clause, as in (11).

- (11) **kà mò mángì úé-’hé mò ná-ndú kìná kú kángà yó**
 if 2s do.PFM two-of that 2s PM-go.IPFV exactly to prison LOC
 ‘If you do that again, you’re going straight to prison!’

The marker **na-** appears to be the prototype of the Indefinite category of pre-stem markers.

22.4.2 Pre-stem marker *á* Future⁷

By contrast, the marker **á-** appears to be the prototype of the Definite category of pre-stem markers: it can turn the Imperfective forms into futures. After a low tone the H of the PM becomes L, as in (12), from Tucker and Hackett (p. 67), and (13) from Boyd (p. 172)

- (12) **mì-à-kpára pásyó mì-à-pàsà pásyó**
 1s-PM-divide.IPFV meat 1s-PM-cook.IPFV meat
 ‘I shall divide the meat.’ ‘I shall cook the meat.’

- (13) **mò à-ímá à-ímá**
 2s PM-last.IPFV INT-last
 ‘You will live a long life.’

It appears that the form in (13) is reduplicated in order to create the effect of an intensifier.

⁶ The complete set of **na**-forms given by Tucker and Hackett is: **-ná-** IPFV, **-ní-ná-** HAB, **-ná-náá-** Past HAB, **-náá-** IMM Past PRG, **-áá-náá-** Past HAB PRG, **-náá-** REL Past PRG, **-náá-náá-** REL Past HAB, **-náá-** “Pluperfect”, **-náá-/náá-** REL Past, **-náá-ní-** REL Past HAB. We only discuss some of these. **Na** probably derives from **na** ‘and, with, have’. It can be seen that double forms, especially reduplicated forms of **-na(a)**- frequently represent habitual or iterative situations.

⁷ The complete set of **a**-forms given by Tucker and Hackett is: **-á-** FUT, **-áá-** Future HAB, **-aa-** Past PRG, **-aa-tá-** Past Simultaneous’, **-á-** Present Indef, **-aa-náá-** Past HAB PRG, **-a-ní-** IMM FUT, **-á-** Past, **-áá-ní-** Pluperfect PRG.

22.4.3 Pre-stem *ní*⁸

This marker, with its high tone, gives the impression of being a marker of the Habitual and Iterative. It is consequently used with the Performative, but may also be used with the Imperfective stem. Examples from Tucker and Hackett (p. 68) are given in (14) and (16), and from Boyd (p. 173) in (15):

- (14) **mì-ní-kpára** **pásyó** **mì-ní-pási** **pásyó**
 1s-PM-divide.PFM meat I-PM-cook.PFM meat
 ‘I always divide the meat.’ ‘I always cook the meat.’
- (15) **pái ní-dù** **kíná wò**
 thing PM-be.PFM exactly thus
 ‘It always happens like that.’

Tucker and Hackett (p. 65) also give examples of /ní-/ with the Imperfective stem, as in (16):

- (16) **mì-ní-ná-kpára** **pásyó** **mì-ní-ná-pàsà** **pásyó**
 1s-PM-PM-divide.IPFV meat 1s-PM-PM-cook.IPFV meat
 ‘I habitually divide the meat.’ ‘I habitually cook the meat.’

It appears that the use of /ní-/ with the Imperfective stem can only occur if the PM /ná-, which is frequently required elsewhere with the Imperfective, is also used. The use of two different PMs is quite common, but there are no examples of more than two in the literature. There may, however, be elements that are either combined, or extended expressively: single elements with a combination of meanings, as will be investigated later.

The contrast of (14) and (16) quite nicely corresponds to the usage of the English Performative and Progressive (the latter overlapping here with the Imperfective usage of Zande). Thus “I always divide the meat” is slightly different from “I’m always dividing the meat”, the latter indicating what is a common habit rather than a general rule. A similar contrast is in the second pair: “I always cook the meat” vs. “I’m always cooking the meat”.

⁸ The complete set of *ni*-forms given by Tucker and Hackett is: **-ní-tá-** Present PRG subordinate’, **-ní-ná-** HAB, **-ní-káá-** IMM FUT, **-ní-** “always”, **-a-ní-** IMM FUT, **-ní-** IMM Past, **-áá-ní-** Pluperfect PRG, **-níí-** REL Recent Past, **-náá-ní-** REL Past HAB. *Ni* is probably derived from *ni* ‘be’.

22.4.4 Pre-stem *tá* ‘as’, simultaneous, subordinate’ and *ni* ‘immediate’⁹

Such adverbial markers may correspond to common English conjunctions such as *when*, *while*, *as*, etc. /*tá*-/ appears to be one of these, since the translations use “while” and Gore describes one of its usages as *Simultaneous action*. There are no examples in the data of this element being used on its own; it is always used with other PMs, as in (17) and (18)

- | | | |
|------|---|---|
| (17) | mì-ní-tá-kpára pásyó
1s-PM-PM-divide.IPFV meat
‘While I am/was dividing the meat.’ | mì-ní-tá-pàsà pásyó
1s-PM-PM-cook.IPFV meat
‘While I am/was cooking the meat.’ |
|------|---|---|

- (18) (Simultaneous action: As I was...?)

- | | |
|---|---|
| mí-áá-tá-kpára pásyó
1s-PM-PM-divide meat
‘I was dividing the meat.’ | mí-áá-tá-pàsà pásyó
1s-PM-PM-cook meat
‘I was cooking the meat.’ |
|---|---|

The /*ni*-/ in (17) is manifestly not the /*ní*-/ “always” of (12)-(14), but a /*ni*-/ that otherwise shows up with M tone and the meaning “immediate”, obviously relevant to the notion of simultaneity in (17), which as a form of the Vast Present carries no tense marking and may be used for either past or non-past reference, depending on the context.

The /*ni*-/ indicating immediacy is found with the Performative stem to indicate immediacy of completed action, as in (19) contrasting with the bare form of the Performative, repeated here with Tucker and Hackett’s examples (1959:68) of the same simple Performative form in (19).

- | | | |
|------|---|---|
| (19) | mì-kpára pásyó
1s-divide.PFV meat
‘I have divided the meat.’ | mì-pási pásyó
1s-cook.PFM meat
‘I have cooked the meat.’ |
| (20) | mì-ni-kpára pásyó
1s-PM-divide.PFM meat
‘I just now divided the meat.’ | mì-ni-pási pásyó
1s-PM-cook.PFM meat
‘I just now cooked the meat.’ |

This /*ni*-/ also shows up with the Imperfective stem, with future reference (Gore’s *Immediate Future*), as shown in (21), so that /*ni*-/ with the Performative stem gives an immediate past as in (20), and with an Imperfective stem gives an immediate future (21).

- | | | |
|------|---|---|
| (21) | mì-ní-káá-kpára pásyó
1s-PM-PM-divide.IPFV meat
‘I shall divide the meat.’ | mì-ní-káá-pàsà pásà
1s-PM-PM-cook.IPFV meat
‘I shall cook the meat.’ |
|------|---|---|

⁹ The complete set of *ta*-forms given by both authors is: **-ní-tá-** ‘Present PRG subordinate’, **-áá-tá-** Past PRG subordinate, **-tá-** “concomitative”, **-tá-ka-** similar to preceding, “inceptive”.

This immediate future is also reported by Boyd (p. 177) as **níkà** ~ **nákà** + IPFV, who comments that the form is probably derived from **ná.yá kà-** ‘come.IPFV for (to)’. If this is correct, the form is a Prospective representation of the near future.

But /ni-/ apparently also shows up in an *Immediate Future* with a Performative stem, cited by Tucker and Hackett (p. 69), where it is postposed to the /á-/ marker cited in (12) and (13) above.

- | | | |
|------|--------------------------------------|------------------------------------|
| (22) | mì-à-ní-kpàrà pásyó | mì-à-ní-pàsì pásyó |
| | 1s-PM-divide.IPFV meat | 1s-PM-cook.IPFV meat |
| | ‘I will divide the meat right away.’ | ‘I will cook the meat right away.’ |

It will be noted that with an Imperfective stem **ni-** represents simultaneous action, as in (18). With a Performative stem it represents (a) the complete event as immediate, just completed as in (20), or (b) with the Prospective marker **à** it represents an immediate future, as in (22). None of these are tense distinctions; the only tense contrast is that between Past and Non-Past, marked entirely by tone, as reported in §22.5 below.

22.4.5 Pre-stem marker **nàá**

It is also possible that the PM /nàá-/ noted by Boyd (1995:175) as “très rare” and listed by Tucker and Hackett (p. 66) as /naá/ is in fact a combination of /ni-/ “immediate” and some other marker. The example given by Boyd is in (23), and Tucker and Hackett’s examples of the “Immediate Past Imperfect” are in (24).

- | | | | | | |
|------|--|-------------------------|-----------------------------|------------------|---------------------|
| (23) | mì rámè yó ’té, | mì nàá.bērà | gù páí | mì nì.ídí | kà.gùmbá.’há |
| | 1s sleep.PFM LOC NEG, 1s | PM.think.IPFV DEM thing | 1s PM.want.PFM for.say.that | | |
| | ‘Je ne dors pas, j’étais en train de penser à ce que je voulais dire.’ | | | | |
| | ‘I’m not asleep, I was just thinking about what I was intending to say.’ | | | | |

If our analysis is right, /ni-/ occurs in both clauses (*thinking* and *intending*). The French translation has been added to show Boyd’s use of a French progressive in order to render the sense of immediacy.

- | | | | | |
|------|----------------------------|--------------|---------------------------|--------------|
| (24) | mí-nàá-kpàrà | pásyó | mí-nàá-pàsà | pásyó |
| | 1s-PM-divide.IPFV | meat | 1s-PM-cook.IPFV | meat |
| | ‘I was dividing the meat.’ | | ‘I was cooking the meat.’ | |

The representation of the past here is achieved here by the HLH sequence on the 1s subject marker and the following PM in both (23) and (24). We now examine the question of a tense contrast marked by a sequence of tones.

22.5 Tense distinctions

We have already seen how the aspectual contrasts of Performative and Imperfective are used to represent (i) time that is already complete and in the memory, time that has already gone by (Performative), and (ii) time that is still incomplete, still to be completed

(Imperfective). In the Vast Present, these two aspectual forms represent what elsewhere may be found as tense contrasts, where a minimal binary tense contrast is often that between Past and Non-Past, time that is in the memory, and time that is not yet in the memory.

Zande appears to have two different ways of representing the Past vs. Non-Past contrast: (i) the aspectual distinction between Performative and Imperfective (marked by an inflection), and (ii) the tense distinction whereby the Past is marked tonally by a HLH sequence, which enables the representation of past states, as in (25). Both systems are augmented by the variety of pre-stem markers, representing adverbial and discourse values. None of these latter appear to mark either tense or aspect by themselves.

- (25) **mí à-ídí** **kà-rūpà-kòò à-rūpà**
 1s PM-want.PFM to-pierce-him INT-pierce
 ‘J’eus envie de le poignarder.’
 ‘I wanted to stab him right there and then.’

Boyd (1995:169) gives a detailed description of the tonal requirements for the past, which we present here in translated form.

We call ‘past’ any verbal syntagma in which a L tone on a prefix is preceded and followed by a H tone. In particular, if the subject is a pronominal element which has no lexical H tone, its first tone becomes H. If the verb is in the *inaccompli* (Imperfective), a high tone on its prefix will immediately precede it; if the verb is in the *accompli* [Performative], the whole verb (as well as the first tone of any object pronoun from the second group) will be H.

The example in (25) from Boyd (p.175) shows the past tense with pre-stem definite marker /á-/ , the H of which is reduced to L after the H on the 1s subject pronoun (normally L), and likewise after the changed 1p subject pronoun (normally àni), and before the H tones of the verbal stem, all as described above. In this way the sequence or pattern of H (subject), L (PM), H (stem) is achieved. The punctual French version of (25) is presented to show the justification for the English translation.

The past tense is also found with the Imperfective stem, as already seen in Tucker and Hackett’s examples in (24).

22.6 Subjunctive and Imperative

The marking of past tense is complicated by the fact that there are minimal forms of the Performative form of the verb (i.e. without PMs) which are modal, and are also marked with a H on the subject marker. These are Subjunctive forms which represent possible events, as in (26). These Subjunctive forms which are marked with a H tone subject may be compared with the minimal forms of the Performative stem with L tone subjects in (19), which aspectually represent a recent past.

- (26) **mí-kpára** **pásyó** **mí-pási** **pásyó**
 1s-divide.PFM.SBJ meat 1s-cook.PFM.SBJ meat
 ‘Que je divise...’ ‘Que je cuise...’
 ‘that I divide the meat’ ‘that I cook the meat’

The French translations are given by Tucker and Hackett to show the Subjunctive sense of these forms, which are used in the second person for Imperatives, as in (27) from Boyd, which also gives a further example of Habitual /ni-/.

- (27) **mó ní.síná** **bòrò' nzù.nzù**
 2s PM.interrogate.PFM.SBJ person truly
 ‘Interrogate each person correctly!’

22.7 Negation

Negation is expressed by adding **-nga** (/ngāà/ after a L) after the verb and a clause final particle¹⁰. Tucker and Hackett write this **-nga** independently after the verb, while Boyd has it as a suffix. The clause final particle is **te** in most contexts but **ya** with subordinate clauses, including Subjunctives. Negative contrasts are far fewer than the affirmatives. By contrast with the nineteen absolutes above (see footnote 4), Tucker and Hackett show only six negatives. A subset of the same pre-stem markers is used, but tonally different from what is shown above. Boyd notes that with one exception, all negative forms are based on the Imperfective. The Imperfective in (29), with pre-stem **-na-**, for example, is used for general statements.

- (29) **bòrò' nà.ɪdà.ngāà** **ngbá.nì** **yò té**
 person PM.want.NEG mouth+LOC.his LOC NEG
 ‘You don’t admit your own crime.’

22.8 Relativization

Both sources mention relativization briefly and agree that it is indicated by head noun and relative clause being bracketed by demonstratives. Boyd (1995:194) says that virtually all absolute forms can appear in relative clauses, as in (30):

- (30) **ko ná-gúmb-á** **gu** **pái** **ré ...**
 3s IPFV-say-IPFV DEM thing DEM
 ‘He says that thing which ...’

The addition of **ká** ‘if’ adds a potential component to the meaning, as in (31):

¹⁰The very same **-nga** occurs in what appears (?) to be a second use. Boyd shows several examples of this suffixal **-nga**, in affirmative sentences and glossed as ‘emphasis’. Other than this, neither source has any mention of focus or emphasis.

- (31) **gu súngé ká mó mángí-hé ré**
 DEM work if you do-that DEM
 ‘The work that you can do...’

As can be seen in footnote 4 above, Tucker and Hackett show many of the TAM markers in relatives with long or lengthened vowels.

22.9 Conclusion

The tense and aspect systems of Zande are actually quite simple, but complicated by markedness factors, and by the existence of a number of adverbial markers of various kinds, which may appear singly, or in combinations in pre-stem position. The number of combinations is not clear: there are no more than two in the accessible data, but even here some of these formatives may already be contracted combinations. These pre-stem markers consequently deserve a more extended study than is possible in this brief survey.

There is one clear aspectual contrast, between an inflectionally unmarked Imperfective, marked by a pre-stem element when used as a finite form, and a Performative marked with a suffix /-i/ which undergoes vowel harmony shifting with all mid and high vowels, so that only stems with /a/ show the original phonological value /-i/ of the suffix on Performatives. This suffix is only found on verbs of Class 2, since verbs of Class 1 are not marked for difference of aspect, so that only Performative forms are found as bare stems, without pre-stem markers, when used as finite forms.

There is also one clear tense contrast between past and non-past, where the non-past appears to be unmarked for tense, and the past is marked tonally, with an HLH pattern in which the final H represents the tone on the first syllable of the verb stem, and the first H the initial syllable of the subject marker. The intervening low is found either on the second syllable of a subject marker, or on pre-stem markers.

23

Tense and Aspect: Discussion and Conclusions

John Hewson

23.1 Introduction

Because much original work was done on questions of Tense and Aspect in the last fifty years, it is important to start with a brief discussion on current terminology in Tense-Aspect studies.

Linguists have in recent years used the generic terms *Completive* and *Incompletive* (see Comrie 1976:18-21 and 44-48 for discussion of *completion*) to cover a range of different sub-categories, both Lexical (L) and Grammatical (G), as in (1).

(1)	Completive	Incompletive
a.	L. Achievements (give, tell, put)	L. Activities (walk, say, think)
b.	G. Perfective (spoken, gone)	G. Imperfective (speaking, going)
c.	G. Nonprogressive (I spoke, I went)	G. Progressive (I was speaking, I was going)

1. The lexical terms in (1a) are those used by Vendler (1967:97-121), and much discussed since, along with such terms as *Achievements* and *States*. The interplay between lexical aspect (sometimes called *Aktionsart*) and grammatical aspect is an important part of TA studies, and acknowledged by all the principal writers in the field..

2. The English Perfectives and Imperfectives in (1b) are non-finite forms (participles), as used in the Auctioneer's "Going..., Going..., Gone! The finite forms (1c), in contrast to the non-finite forms in (1b), are Progressive and "Nonprogressive".

3. The term *Nonprogressive* is used by Comrie (1976:25), but has been criticized by others, e.g. Bybee et al. 1994:138, who note that "Nonprogressive is not defined", and prefer to use the term *Perfective* instead.

4. There are, however, major differences in patterns of usage and distribution between Perfective and "Nonprogressive", just as there are between Imperfective and Progressive: a "Nonprogressive" is demonstrably not a Perfective. In the present study two different terms have been used to replace *Nonprogressive*: (i) *Factative*, from Welmers (1973:345-7) is used by Nurse

and Rose, and (ii) *Performative* used in Hewson & Bubenik (1997:12-20) for the “Nonprogressive” forms in Indo-European, is used by Hewson. The terminology for the Nonprogressive/ Factative/ Performative aspect will be discussed briefly in what follows (23.5)

5. Hewson & Bubenik (1997) also used the term *Retrospective* instead of *Perfect* to avoid the well-known confusions between the terms *Perfect* and *Perfective*. In this they followed Comrie (1976:64: “The perfect is retrospective...”) in noting the correspondence between Prospective (looking forward to the event) and Retrospective (looking back to the event). The term is consequently used by Hewson, for clarification, alongside the common term *Perfect*. The term *Anterior*, another alternative for *Perfect*, was not used because of its ambiguities: a Past tense may also be described, as well as the Perfect, as anterior to the present.

6. Apart from these minor differences of terminology, the following terms are not used in any significantly different way by the three authors of this work: Imperfective, Perfective, Progressive, Prospective, Habitual, Iterative, Situative. In what follows, therefore, an attempt has been made to create diagrams of the Tense/ Aspect systems of each of the 23 languages reported on, following the pattern already established by Ian Maddieson for phonology (1984). Such typological diagrams were originally created to demonstrate the different TA systems of the twelve Indo-European families in Hewson and Bubenik 1997, and were used in the final chapter (1997:351-364) for comparative purposes.

7. Maddieson’s diagrams of vowel systems took advantage of the well-known fact that vowel systems have coherent patterns, resembling the coherent patterns of the natural world, such as the crystalline patterns of snow flakes, or of rock structures. Similar balanced and coherent patterns are found in Tense and Aspect systems, as well as in other grammatical paradigms, such as case systems, and pronoun systems. Paradigmatic statements, for the most part, trace the outlines of such systems, which are based on meaningful contrasts that show great regularity, even if the morphology that marks them is sometimes irregular: the irregular plurals *mice*, *geese*, *children* have the same plural meaning as the regular plurals *cats*, *dogs*, and *horses*.

23.2. Defining Tense and Aspect

Tense and Aspect contrast with each other in terms of Container and Contained.

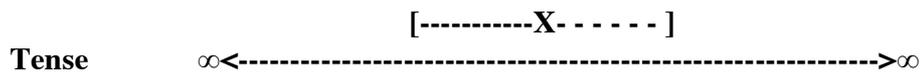
23.21 **Aspect** is a representation of **Event Time**, the time that is contained in the Event. Aspectual forms will be illustrated by the use of square brackets to represent the initial and final moments of the event. Aspectual forms can then be represented using a scheme of five cardinal positions (Hewson & Bubenik 1997:14), of the subject, as in (2),

(2) **A[B-----C-----D]E**

where A = Prospective (before the event), B = Inceptive and Situative (in initial position), C = Imperfective and Progressive (intermediate position), D = Perfective (in final position), and E = Retrospective/ Perfect (after the event).

23.22. **Tense** is a representation of **Universe Time**, the time that contains the Event. Since it is axiomatic that containing time necessarily exceeds the time contained, it will be illustrated by a continuous line running between an infinity in the past and an infinity in the future, as in (3), where an aspectual form with subject **X** in position **C** (Imperfective/ Progressive) becomes a tensed form contained by a single tense representing the whole of Universe Time.

(3)



The aspect that is represented in (3) as contained within the square brackets is Incomplete, the generic term for both Imperfective and Progressive: the solid line represents the *accompli* (what has been completed) and the dotted line represents *inaccompli* (what is still to be completed). Further details must be added to the diagram (see below) in order to distinguish the Imperfective from the Progressive. The tense which contains the event in (3) is a Vast Present, represented as stretching from an infinity in the past to an infinity in the future, without any tense contrasts. Tense contrasts would divide the line into two or three or four, as in (6), (7) below, where the examples are from Indo-European, and (8) with an example from Bantu.

23.3 Descending versus Ascending Time

The quasi-universal distinction between Descending and Ascending Time is based on the fact that time is movement, the apprehension of which requires either a figure to move against a background (Ascending Time), or a background to move against a figure (Descending Time). Time that operates in the Working Memory (an entity accessible to measurement) is the empirical experience of time, since the Working Memory automatically records (an analog operation) the perceptions of the individual, and each new memory moves further into the past (leftwards in the diagrams) as further memory is accumulated, an experience reflected in the *Going, Going, Gone* of the auctioneer, as in (4)

There are three stages to the closure of a sale, the last one normally punctuated by a blow of the auctioneer's gavel: (4a) represents the beginning, (4b) the middle, and (4c) the end, as these are recorded by the Working Memory (which operates in Descending Time), while the earlier phases (marked by **x**) drift deeper into the past. This purely passive (objective, subconscious) apprehension of recorded experience is entirely automatic (an analogue operation), whereas the active (subjective, conscious) attention of the observer follows the sequence of events, the three consecutive phases that constitute closure (a digital operation), as in (4d), which may then lead to the conclusion "It *went* (i.e. was sold) for thirty dollars".

- | | | | |
|-----|----|---|----------------------|
| (4) | a. | [< X -----] | going (IPFV) |
| | b. | [< x ----- X -----] | going (IPFV) |
| | c. | [< x ----- x ----- X] | gone (PFV) |
| | d. | [Phase1 -----> Phase2 -----> Phase3] | it went (PFM) |

The major difference between Perfective aspect on the one hand and Performative/ Factative aspect on the other is that statives, which are phasally complete from the very first moment (they are monophasal), have a quite different usage and distribution from that of active verbs (which are metaphasal¹). In English, for example, it frequently occurs that the Progressive can *not* be used for statives in sentences where other languages are required to use the Imperfective², as in (5).

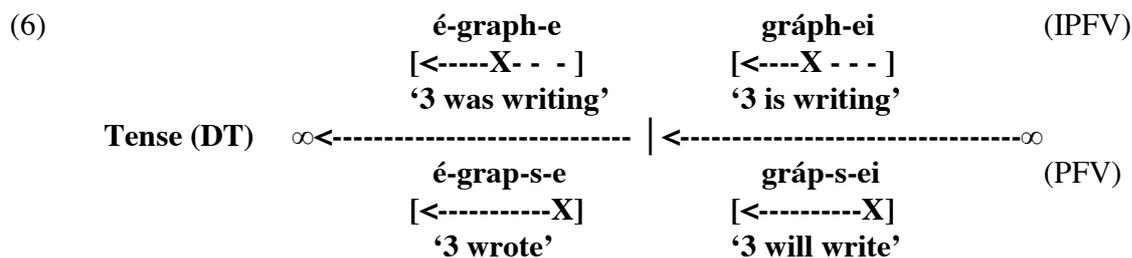
- | | | | |
|-----|-------------|----------------------------|-------------------------------------|
| (5) | a. English. | I knew what he wanted. | *I was knowing what he was wanting. |
| | b. French. | Je savais ce qu'il voulait | *J'ai su ce qu'il a voulu. |
| | c. Russian | Ya znaval shto on khotel | *Ya znal shto on zakhotel |

In short, a Perfective represents an event as temporally complete, whereas a Performative represents an event as phasally complete, even if it is temporally incomplete: *The sun **shines** on the earth 24 hours a day, as it **turns** on its axis.*

23.4 Differing tense typologies

The majority of languages in the IE phylum have a binary tense system, Past versus Non-Past, but with two distinctively different types: Type A with both tenses in D(escending) T(ime) (e.g. Greek, Slavic, Armenian), and Type B (e.g. Germanic, Hittite, Farsi) with both tenses in A(scending) T(ime). There are also Type C systems (Celtic, Italic, and Baltic) that combine both DT and AT, but they are all ternary systems with Past, Present and Future (Hewson & Bubenik 1997:353ff) and represent a minority in the IE groupings. An example of Type A is in (6), and of Type B in (7).

In the Greek example of Type A, the arrows all point to the left, showing two tenses in Descending Time, with Imperfective aspects above the line, and Perfective aspects below. (Note that a Perfective in a Non-Past tense typically has a future reference, exactly as it does, for example, in Eastern and Western Slavic).

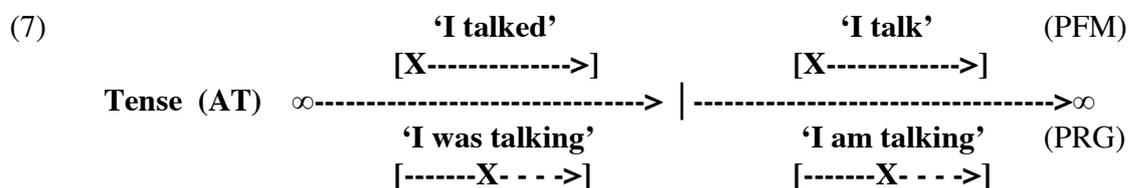


¹The *monophasal* vs. *metaphasal* terminology is from Hirtle 2007:88.

² The Imperfective aspect of the Present Participle becomes observable in a minimal pair: Knowing what he wanted (I knew/ *was knowing what he wanted so) I opened the door.

The morphological marking is as follows: (i) the prefix *é-* marks the Past tense; the Non-Past is unmarked; (ii) the suffix *-s* marks the Perfective aspect; the Imperfective is unmarked. The symmetry and the markedness patterns are typical of TA systems. The least marked form is the base form of the paradigm; markers are added to it to indicate layers of processing: the Past (representing Memorial Time) is the product (memory) of the Present, and the Perfective is the completion of what was once Imperfective. As noted by Jakobson apropos of the Slavic languages ([1957] 1984:49), “...futurity is the most usual meaning of the perfective present” (i.e. of the Perfective Non-Past). In Non-Past tenses it is normal to distinguish the Present from the Future by aspectual means.

The tense system of English is also binary, but in AscendingTime, the mirror image of the Greek system. Consequently the Completive form (the Performative) is unmarked, and the Incompletive (the Progressive) marked, as in (5). The base form of the paradigm is **talk**.



The TA systems of Niger-Congo languages are typologically different from Indo-European in several important ways: (i) they normally have forms in both Ascending and Descending Time; (ii) the non-Bantu languages often have only a single tense, a Vast Present where the present is represented by an Incompletive form, and the past by a Completive form (since what is complete in the Vast Present is necessarily in Memorial Time); and (iii) the Bantu languages often have a multiplicity of tenses, far more than has been reported elsewhere in the languages of the world.

It may be assumed that languages that have only a single tense (the Vast Present) and no tense contrasts, are tenseless, but there are indications that such a conclusion is unwarranted. It would be difficult for a language to develop tense *contrasts*, for example, if there were no representation of tense to start with. Furthermore, if aspectual contrasts (such as Perfective vs. Imperfective) are used to distinguish events that are past from those that are ongoing in the present, both of these forms necessarily have some kind of tense reference or function; they make deictic reference to the here-and-now of the speaker-hearer. It appears to be a linguistic universal that finite forms, with subjects, always have some kind of tense, even if it be only the single Vast Present, where incompletive forms represent the ongoing here-and-now and completive forms represent the past because it is axiomatic that whatever is complete in the here-and-now has already taken place.

When tense contrasts are multiple, it is often more convenient to represent them as part of the line, as in (5), showing the four contrastive tenses of Bukusu (Chapter Four). The arrows point to the right, indicating Ascending Time, representing Completive events; the aspect is not Perfective, however, but Performative or Factative, which is frequently unmarked, being the basic form of representations in Ascending Time. The initial element is the 1pl Subject marker, the tense marker precedes the root **-kul** ‘buy’ and the final vowel represents the indicative, so

that **xw-a-kul-á** means ‘we bought’. The corresponding Bukusu marked form is the Progressive.

(8)

∞ ----->	----->	----->	-----> ∞
xw-a-kul-á	xw-ááxa-kul-a	xu-la-kul-a	xu-li-kúl-a
Far Past	Near Past	Near Future	Far Future

The chart of Bukusu forms in Chapter 4 shows four past tenses while only two are shown above in (8). Different results stem from the use of different criteria for discriminatory and analytic purposes. The chart in Chapter 4 emphasizes function and lists each form for its functional value, so that forms with the suffix **-ile** are included in the same column with those that have only **-a**. The analysis in (8) is based on form, which necessarily excludes P₂ **xu-kúl-ile** and P₃ **xw-aa-kúl-ile**, which carry the Perfective suffix **-ile** which is not found on P₁ and P₄, which are marked for tense but not for aspect. The problem is an old one of a clash of a traditional terminology with a terminology based on a different linguistic categorization; it will be discussed further apropos of Ruhaya in 23.62. It is a perennial problem: Comrie notes (1976:78), apropos of Arabic: “Here the terms Perfective and Imperfective will be used, although the meanings of the terms are different from those used in Slavonic linguistics and elsewhere in this book”; it is demonstrably obvious, in fact, that the “Perfectives” of Arabic and other Semitic languages are in fact Performatives. There are no real Perfectives in Arabic, in Comrie’s normal use of the term, but those working in the field of Semitic may nevertheless be reluctant to change a terminology they have always used, just to accommodate what is used elsewhere.

23.5. Differences of terminology

We have already looked at the three different possible terms for the aspect that represents the phasally complete event: Nonprogressive, Factative, Performative. The first of these has to confront the fact that all Germanic languages have two tenses in Ascending Time, but only two (English and Icelandic) have Progressives (Hewson & Bubenik 1997:210-11). *Nonprogressive*, consequently would not be suitable for the two simple tenses of Dutch and German, since these languages do not have a grammaticalized Progressive. Welmers’ term *Factative* also has its problems: (1) it is easily confused with *Factitive*, which is in the dictionary, whereas *Factative* is not; and (2) Welmers explains his term as a name for a form which “expresses the most obvious fact about the verb in question, which in the case of active verbs is that the action was observed or took place, but for stative verbs is that the situation obtains at the present” (1973:346-7). Comrie, however, writing at about the same time (1976:113), comments on the use of the Russian *Imperfective* in “what has been called the constative general factual, or simple denotative meaning of the Imperfective. Here the speaker is simply interested in expressing the bare fact that such an event did take place, without any further implications”. The English Progressive is also used to express obvious fact (*he’s reading the paper*), so that *Factative* is ambiguous, and could be used of a variety of forms.

The term Performative was chosen for use in Hewson & Bubenik 1997 for two reasons: (1) this form of the verb often represents an actual performance, as pointed out originally by Austin (1962): *I promise* is a promise; *I am promising* is not; *I resign* is a resignation; *I am resigning* is not. Genuine Perfectives can *not* be used here; speakers of Slavic languages are constrained to

use Imperfectives in the Performative function (V. Bubenik, p.c.).

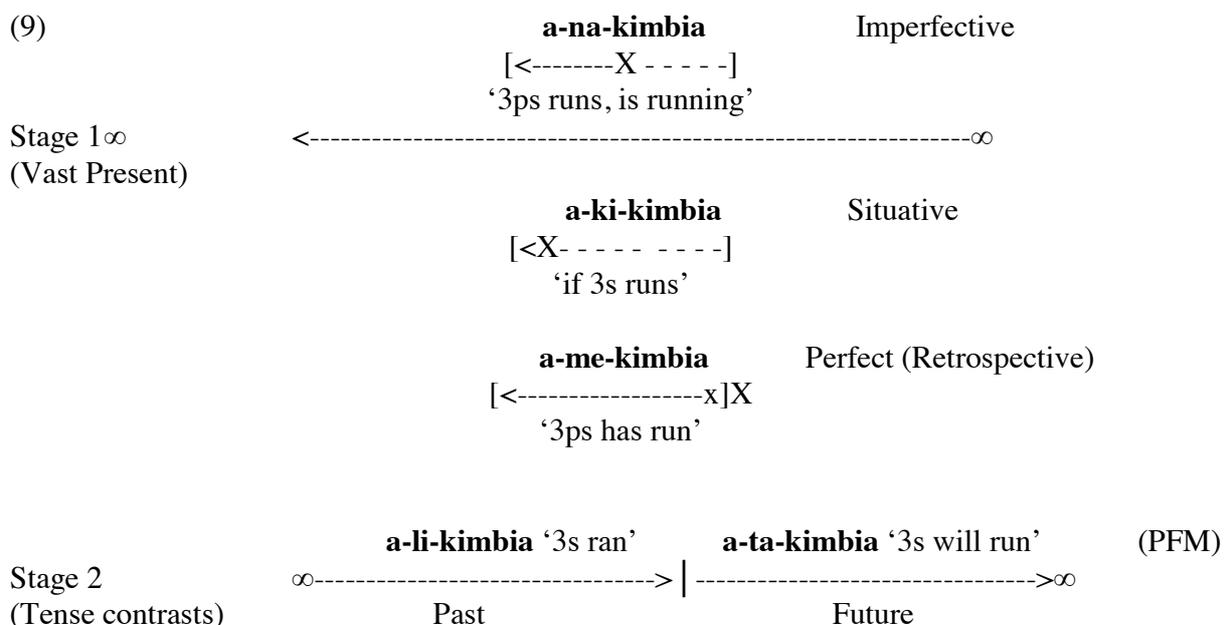
There are dozens of verbs in English (I insist, I apologize, I give up, I thank you) where the use of the simple form of the verb is a performance of the event itself. It is also used for giving instructions on performance, as in stage directions: *She takes off her hat and lays it on the table.* It is used as well to accompany performance as in a cookery demonstration: *I take a couple of eggs, and put them in a bowl,* or to describe a performance: *He shoots, he scores!* Finally, since a Performative represents a complete performance of all phases of an event, it is used to represent states, which are monophasal: as soon as they have begun, all phases of the event are then complete; the continuation of the event in time is irrelevant to Performative aspect. A Perfective on the other hand is a representation of an event that is *temporally* complete. The two must not be confused.

23.6 The schematic diagrams

The use of diagrams to portray the grammatical meaning that a given verbal form brings to a phrase or a sentence provides a remarkable economy of statement. The basic conventions are presented in (2) and (3) above.

23.61 The Swahili TA system

These diagrams were first used for Niger-Congo languages in the sketch of the Swahili system (Hewson and Nurse 2001) that was product of an ongoing seminar with Swahili speakers. In order to make sense of certain constraints in the Swahili system (aspectual forms for Future and Past are always compounds, single aspectual forms are always Present Tense) it became clear that there was a two-stage system of tense: a Vast Present representing the whole of Universe Time, binarily divided, at a secondary stage, into Past and Future as in (9).



The Past and Future tenses of Swahili are hyponyms of the Vast Present, in the same way that *dog* and *cat* are hyponyms of *animal*: Past and Future are derived from the Vast Present. In Indo-European languages that have separate Past, Present, and Future tenses, the Present separates the Past and Future by occupying the space between them, as in the system of Modern French, where, unlike Swahili, the Present Perfect is formed as a compound, in exactly the same way as the Past and Future Perfects. In Swahili the Present Perfect is a single word; the Past and Future Perfect are compounds, as in (10). The Swahili auxiliary is **-kuwa** ‘be’.

(10)	Swahili	French	English
	amekimbia	il a couru	‘he has run’
	alikuwa amekimbia	il avait couru	‘he had run’
	atakuwa amekimbia	il aura couru	‘he will have run’

Which may then be arranged vertically, as in (11).

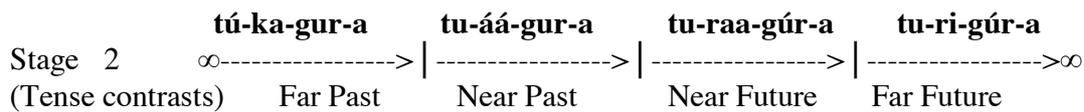
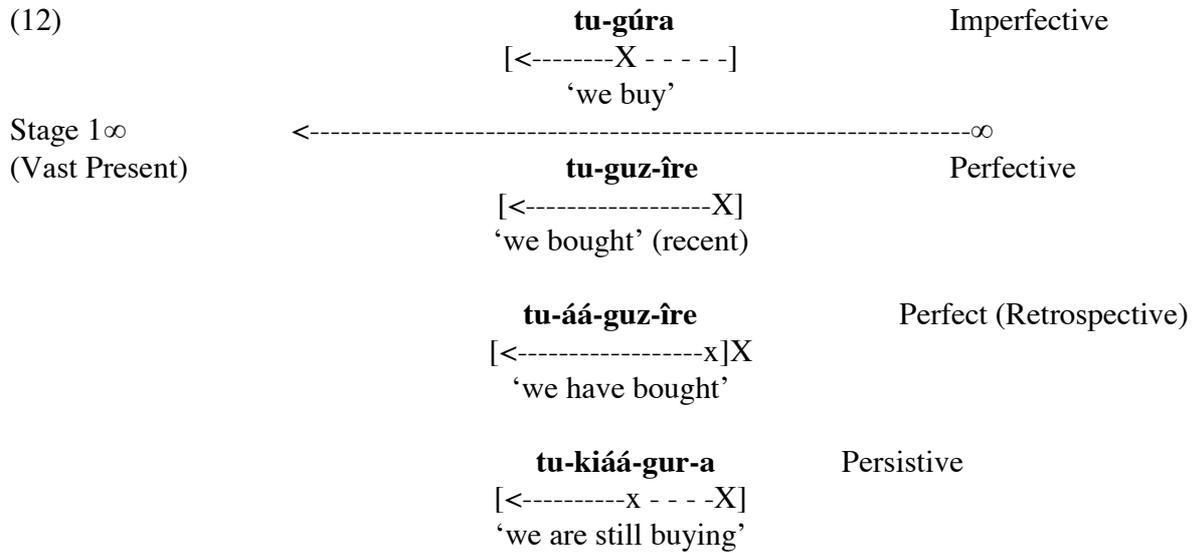
(11)		Past	Pres	Future
	a. French	Simple	3s courait	3s court
		Compound	3s avait couru	3s a couru
			3s aura couru	
	b. Swahili VPres	-----	a-me-kimbia	-----
	Past and Future	a-li-kuwa	a-me-kimbia	a-ta-kuwa
				a-me-kimbia

It was the skewing of the paradigm in Swahili that led to the discovery that there is a two-staged tense system in Swahili, a Vast Present at one level, which is divided between Past and Future at a second level (Hewson & Nurse 2001), which accounts for the constraints found in the usage of the Swahili system.

23.62 The Ruhaya TA system

The seminar worked for another considerable period of time with Henry Muzale, a native speaker of Ruhaya, and it became clear that Ruhaya also has a Vast Present, from which are derived, at a secondary level, a secondary set of four tense contrasts, a Near Past and Future, and a Far Past and Future, as in (12). The verb root is **-gura** ‘buy’, and the SM **tu-** ‘we’.

The fruit of months of discussions was presented in a paper in *African Linguistics* (Hewson, Nurse & Mugale 2000) with the diagram shown in (12), which presents **tu-guz-îre**, a form marked only with a suffix that is commonly used elsewhere in Bantu as a marker of Perfective aspect, as a form of the Vast Present, the forms of which include other forms having no marker in the pre-stem position that might be considered a tense marker (the **áá** of **tu-áá-guz-îre** changes the Perfective into a Retrospective; it probably has an adverbial meaning akin to ‘already’, and occurs also on the Persistent). The contrastive tenses, by contrast, are all marked for tense in the pre-stem position.



In the early work on Ruhaya, as reported by Comrie (1985:29ff, 46, 87, 90, 94, 95ff), using the then unpublished work of Ernest Byarushengo, the form **tu-guz-îre** is presented in the following hierarchy of past tense:

- (13)
- | | | | |
|--|----------------|--------------------|--|
| | P ₁ | tu-áá-gur-a | hodiernal, used only for ‘today’ |
| | P ₂ | tu-guz-îre | hesternal, used only for ‘yesterday’ |
| | P ₃ | tú-ka-gur-a | far past, used only for ‘beyond yesterday’ |

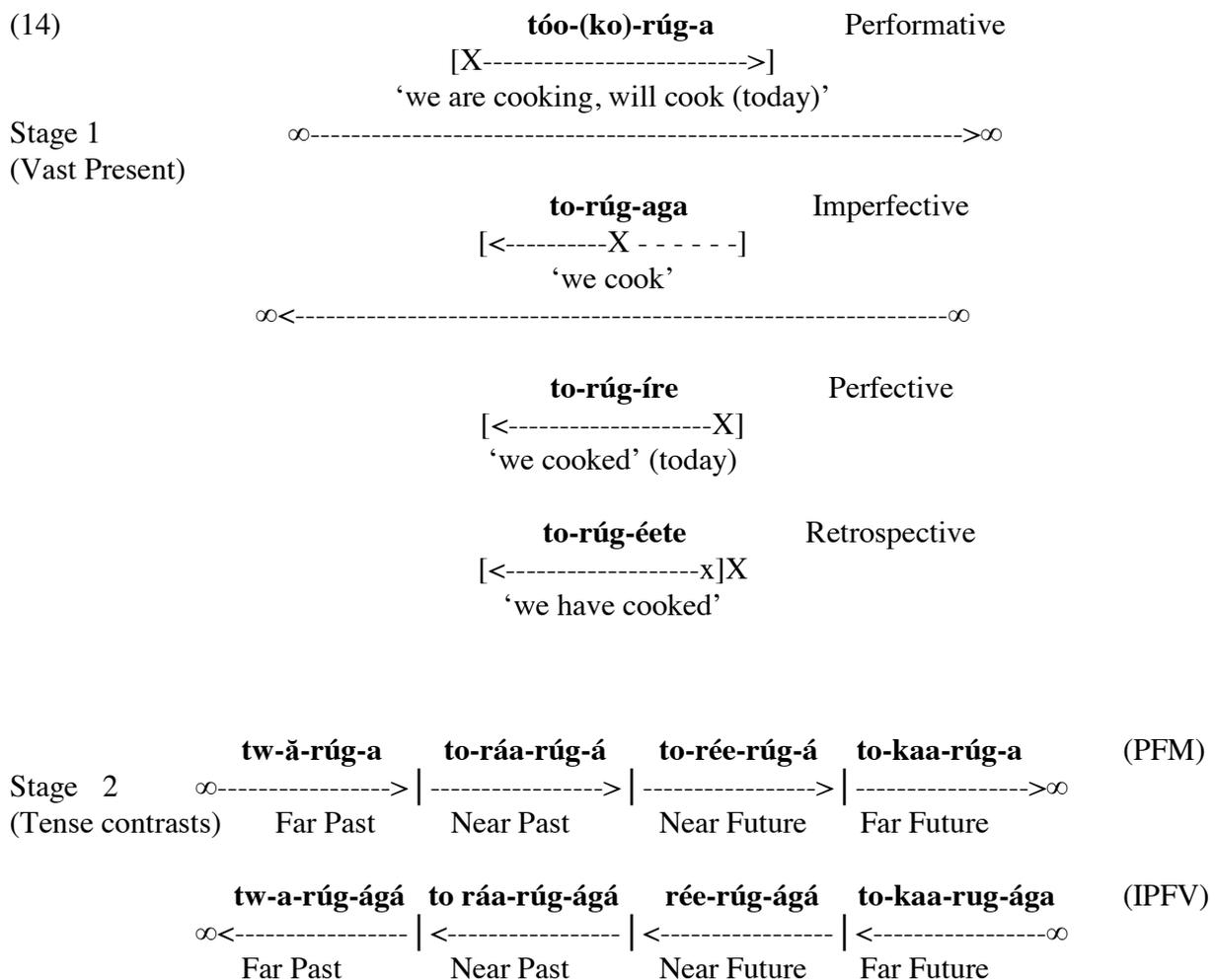
Before the recognition of the existence of the Vast Present as a separate systemic entity, this analysis is perfectly appropriate. But once recognizes that **tu-guz-îre** is simply the Perfective form of **tu-gur-a**, and that neither form is marked for tense, then arguments advanced by Comrie call for a different analysis: “...the failure to distinguish between meaning and implicature is one of the main problems in working out an adequate characterization of tenses” (1978:28), and “...a grammatical category in discourse should not be confused with the meaning of that category; instead, the discourse functions should ultimately be accounted for in terms of the interaction of meaning and context” (1978:29).

In short, P₂ is a discourse function of the Perfective form of the Vast Present, and not a part of the set of contrastive tenses, all of which are marked for tense, and none of which are marked for aspect. The normal and natural meaning of a Perfective Vast Present is ‘recent past’. It was noted by Pānini, for example, that the meaning of the aorist (adyatana, i.e. Perfective) in early Sanskrit was ‘recent past’ (Bubenik 1997:63). With the development of a set of tense contrasts, the

Perfective Vast Present can become somewhat redundant; it has disappeared from Standard Swahili in historical times, but was still in use in 19th century missionary grammars.

23.63 The Kikuyu TA system

The Kikuyu TA system is similar to that of Ruhaya, except that it has eight contrastive tenses instead of 4: it has four Performatives (Near and Far Past, Near and Far Future), and four corresponding Imperfectives. The plethora of tense forms is so rich, in fact, that two of the tense forms (Near and Far Past Performatives), being largely redundant because there are also Perfective and Retrospective Pasts, are used in aspectual function as ‘Short Progressive’ (Near Past) and ‘Short Perfect’ (Far Past). This system, described in Hewson & Nurse 2005, along with an explanation of its somewhat unusual skewing, is presented in (14). The root is **-rug** ‘cook’.



It is the Near Past Performative, **to-ráa-rúg-á**, which represents the last moments of the past before the future (the past that is the experiential time of the working memory) is used functionally as a “short progressive” (= right now), and the Far Past Performative, **tw-ǎ-rúg-a**

which represents the last moments of the past before the working memory, is used as a “short perfect” (= ‘just happened’). This skewing of paradigmatic forms in discourse usage is made possible by the existence of Perfective pasts (corresponding to the Imperfectives) which are used in Kikuyu for the normal representation of complete events in the Past.

26.7 The TA systems of West African Niger-Congo.

The schematic diagrams of Tense-Aspect systems of the 21 languages examined and analysed in Chapters 2-22 are in Appendix A. The Chart List, with summaries of aspectual usage, is appended here. (TC = tense contrasts). Since a major purpose of putting this information on a website is to enable corrections and clarifications, comments will be most welcome.

		PFM	PRG	IPFV	PFV	RTR	PRP	SIT	TC
2	Aghem	X		X					X
3	Bambara	X	X		X		X		
4	Bukusu	X		X	X	X			X
5	Bijago	X		X			X	X	
6	Degema	X		X		X	X		
7	Dogon	X		X		X	X		
8	Doyayo	X		X					X
9	Ejagham	X	X	X		X	X	X	
10	Ewe	X	X	X			X		
11	Fula		X	X	X		X		
12	Godie	X	X	X		X	X		
13	Ijo	X	X	X		X	X		
14	Jukun	X	X			X	X	X	
15	Kabiye	X		X			X		
16	Kisi	X	X	X		X	X		
17	Makaa	X	X	X		X			X
18	Obolo	X	X	X		X	X	X	
19	Otoro	X	X	X		X	X		
20	Supyire	X	X	X		X	X		
21	Yoruba	X	X			X	X		
22	Zande	X	X						X

Notes

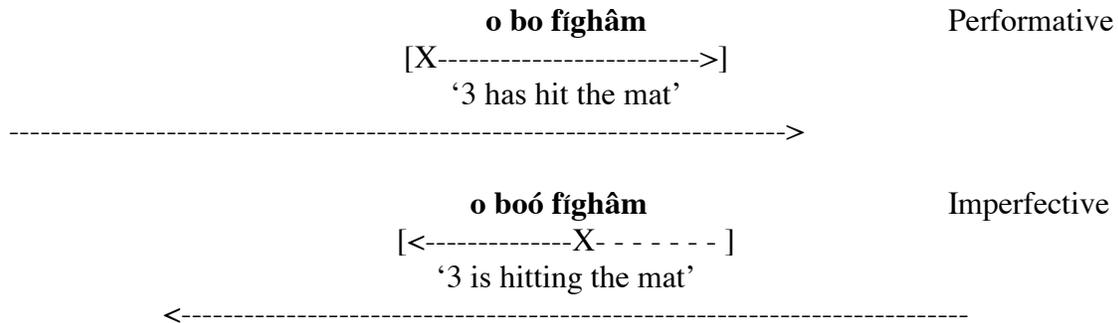
1. Fula is the only one of the 21 languages that has no Performative
2. Bambara and Bukusu have both Perfective and Performative. In Bambara the Intransitives have a Perfective, and the Transitives a Performative.
3. Five languages have tense contrasts as well as aspectual contrasts.
4. Nine languages have all of the following: PFM, PRG, IPFV, RTR, PRP
5. Thirteen out of 21 have both PFM and PRG.
6. Sixteen have PFM and IPFV, the predominant pattern for the basic Complete versus Incomplete contrast, a pattern also found in the Afro-Asiatic languages of North Africa and the Middle East (V.Bubenik, p.c.).

2

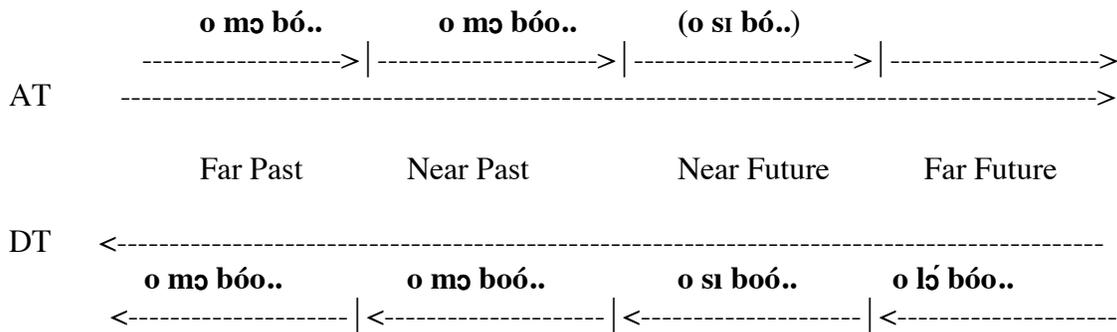
Aghem

(Bantoid, Grassfields Bantu)

Stage 1 (Vast Present)



Stage 2 (Tense contrasts)



1. With stative verbs the VP Performative represents the experiential present: **o ki fíghâm** “3 has a mat”.
2. The Near tenses are hodiernal; the Past is pre-hodiernal and the Future post-hodiernal. They are extensions of the Present: the Memorial Present and the Non-Memorial Present.
3. The Non-memorial Performative is a Subjunctive, with underlying subjunctive **é** deleted after **sɪ** but its tone transferred to the **bó**.
4. This system is of a typical Bantu pattern: a Vast Present followed by a set of tense contrasts.

3

Bambara

(Manding, Mande)

1. Participles

Imperfective	<p>-to</p> <p> <-----X----- </p> <p>partially completed event</p>
Perfect (Retrospective)	<p>-len</p> <p> <-----x X</p> <p>completed event</p>
Situative ("Anticipatory")	<p>-ta</p> <p> <X----- </p> <p>potential event</p>

2a. Intransitive finite forms¹

Progressive	<p>à bɛ́ ná</p> <p>[-----X----->]</p> <p>'3s is coming'</p>
<p>←-----></p>	
Perfective	<p>à ná-na</p> <p>[<-----X]</p> <p>'3s came/has come'</p>
Prospective	<p>à bɛ́ na ná</p> <p>X[x----->]</p> <p>'3s will come'</p>

Notes

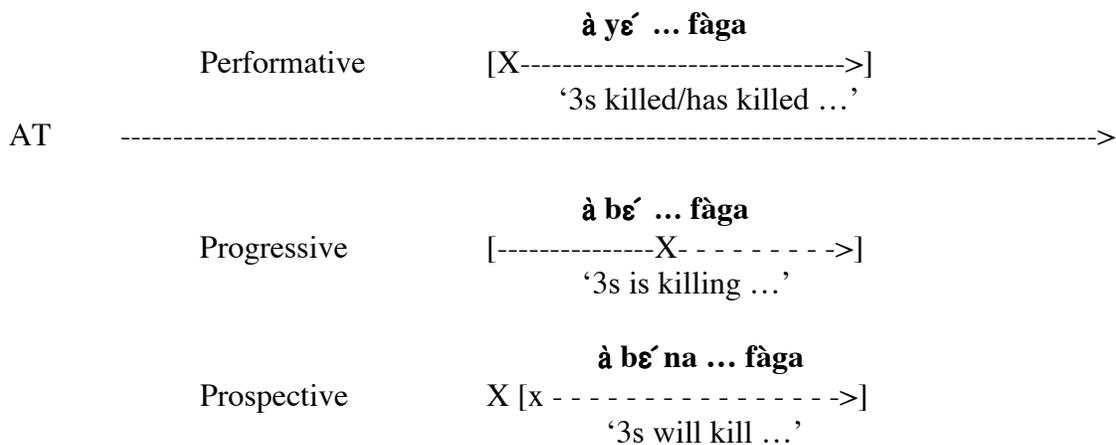
1. The use of an auxiliary is a good justification for describing **à bɛ́ ná** as Progressive rather than as Imperfective. Progressives are typically formed by the use of some kind of an auxiliary element.

¹The form **nána** is underlying **ná-ra**. Each of the three finite forms can form compounds with the shifter **tùn**, which shifts the event represented to an earlier moment of time.

2. The suffix of **à ná-na**, which parallels the participial suffix **-len**, and contrasts with the Performative auxiliary **yε'** is also a justification for considering this form as a Perfective rather than as a Performative. Further research is needed to confirm this analysis.

3. These forms at Level 2a are finite, and show a relationship between the representation of Event Time and that of Universe Time. As a result the Progressive represents the ongoing present, the Perfective represents the past (time coeval with the memory), and the Prospective represents the future (time coeval with the imagination).

2b. Transitive Finite forms

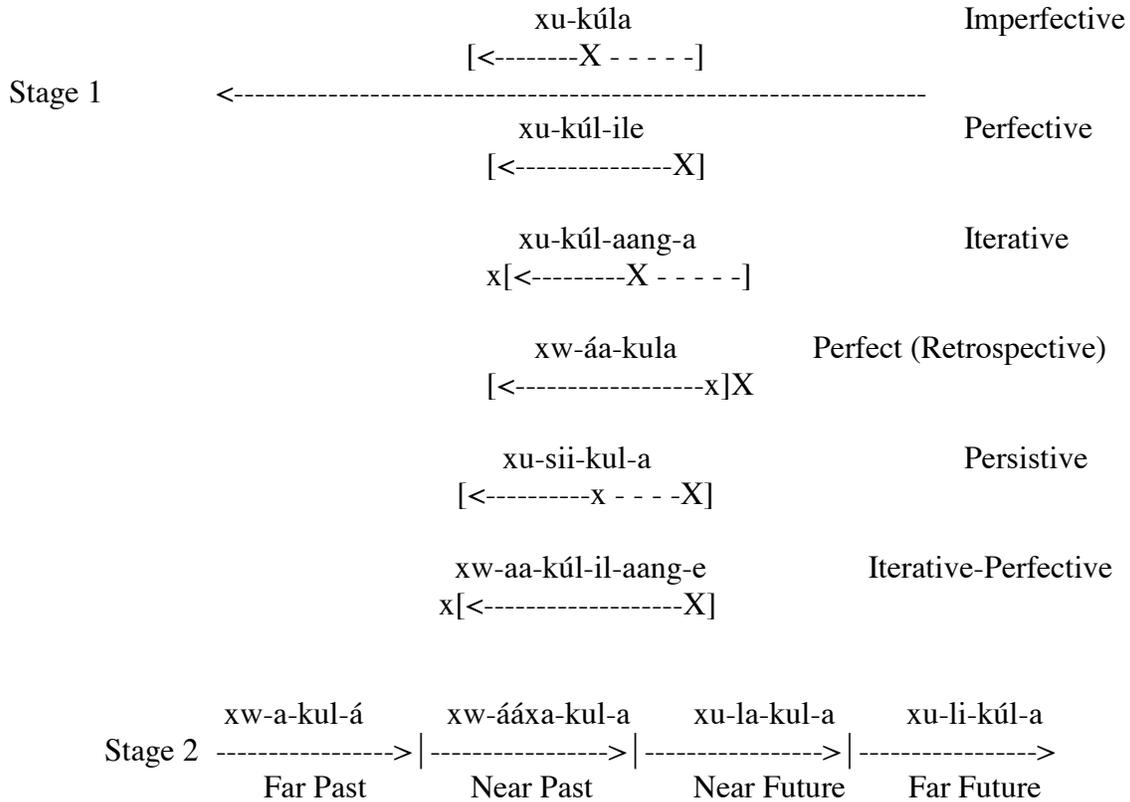


1. Each of the three finite forms can form compounds with the shifter **tùn**, which shifts the event represented to an earlier moment of time.

4

Bantu Narrow (Bantoid, E. Benue-Congo)

BUKUSU VERBAL SYSTEM



1. Excluded: Subjunctives, which are found in tense function but would require a separate representation (Imaginary Time).
2. From the forms above, the extended paradigmatic array of Lu-bukusu can be derived. Systemic tense contrasts are marked only in pre-stem position. Contrastive tenses may not be used in second position in compound forms.
3. Of the six aspectual forms of the Vast Present, 1 is unmarked, 2,3 have suffixes; 4-6 are marked in pre-stem position; and 7 has a double suffix.
4. Of the four contrastive tenses the Near Past represents the time of the working memory (just now), beyond which is the Past; the Near Future represents the time of the working imagination (later today), beyond which is the Future.
5. Aspectual forms are also used in tense function: the Perfective to represent earlier today (hodiernal), and the Retrospective to represent yesterday (hesternal).

6

Degema

(Delta, Edoid, Atlantic-Congo)

(i) Forms in Ascending Time

	ɔ-dí-īn	Performative
	[X----->]	
	‘3s ate’	
←----->		
	ɔ-ɗa mō gbé	Prospective
	X[x----->]	
	3s-AUX 3s-go	

(ii) Forms in Descending Time

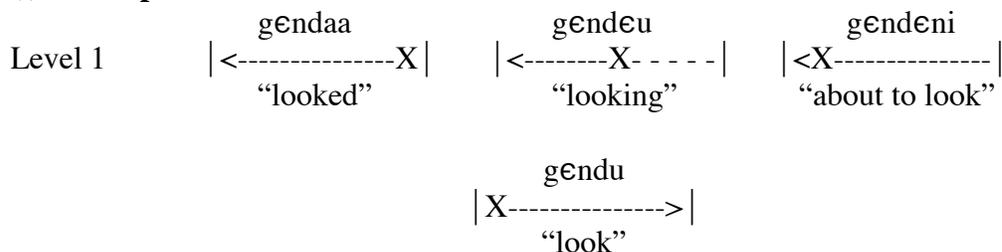
	mɔ'-dí	Imperfective
	[<-----X-----]	
	‘3s is eating’	
	ɔ-dí-tē	Perfect
	[<-----x]X	
	‘3s has eaten’	

1. The language has many other auxiliaries, both modal and aspectual; the Prospective illustrated above is Inceptive in sense: ‘he is about to go’.

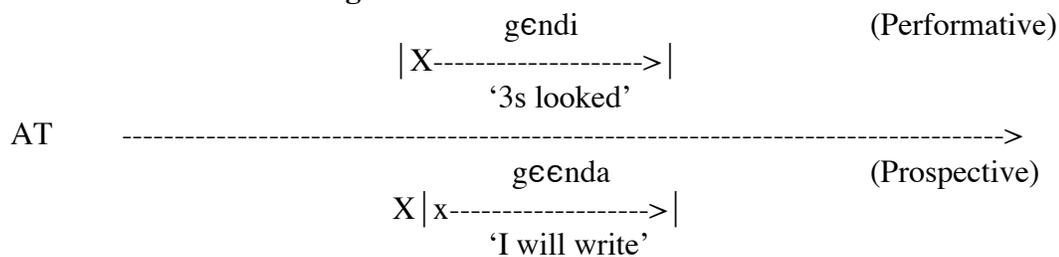
7

Donno So (Dogon)
(Volta-Congo, Atlantic-Congo)

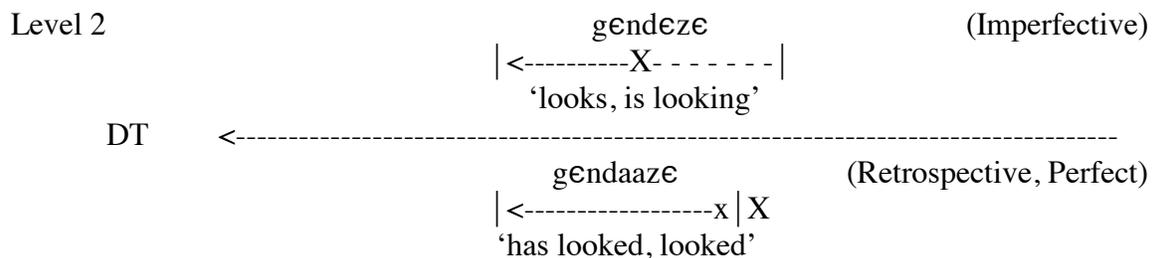
(i) Participles



(ii) Finite forms in Ascending Time



(iii) Finite forms in Descending Time



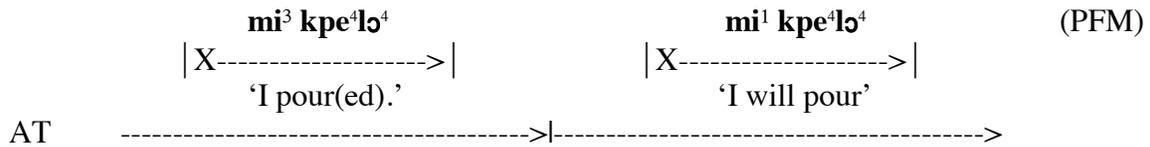
1. This sketch has been constructed using only the simple forms of the language.

8

Doyayo

(Duru, Adamawa, Adamawa-Ubangi)

(i) Forms in Ascending Time



(ii) Forms in Descending Time



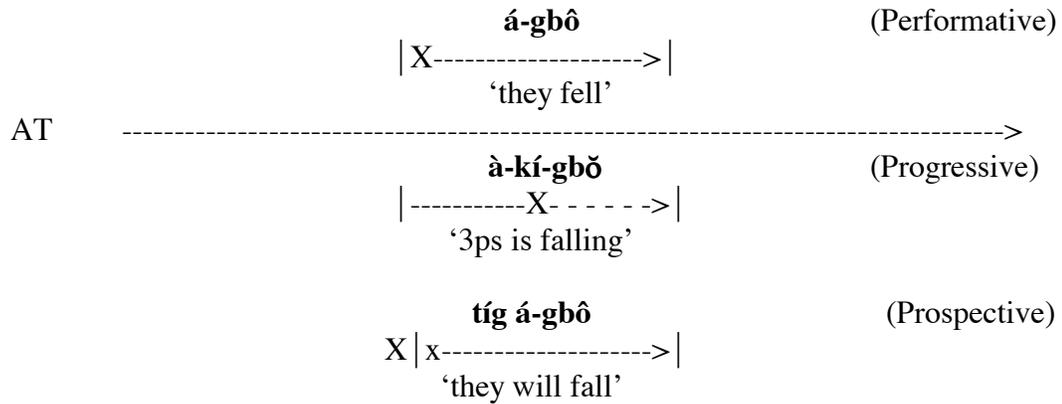
1. The Performative is the unmarked form of the paradigm.
2. The Imperfective is marked by the suffix - **ko**³- on the root.
3. The Progressive is marked by the auxiliary **gi**².
4. The Future is marked by High Tone on the subject pronoun.
5. This is a very unusual four-square system of two tenses and two aspects.

9

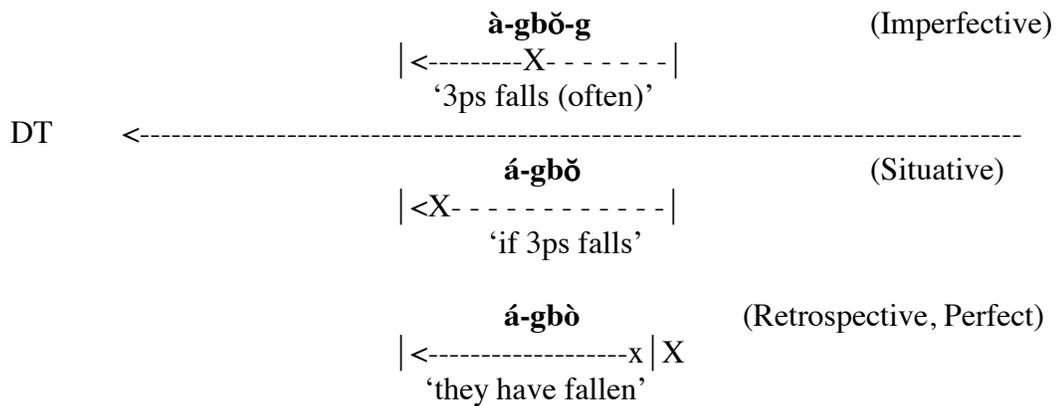
Ejagham

(Ekoid Bantu)

(i) Forms in Ascending Time



(ii) Forms in Descending Time



1. A neatly balanced system of six aspectual forms Ejagham reflects a common pattern for West African Niger-Congo languages.

10

Ewe

(Kwa, Benue-Kwa)

(i) Forms in Ascending Time

	$\begin{array}{c} \mathbf{\acute{e}=ku} \\ X\text{-----}> \\ \text{'3s died'} \end{array}$	(Performative)
AT	----->	
	$\begin{array}{c} \mathbf{me=le\ d\acute{o}\ w\acute{o}-m'} \\ -----X\text{-----}> \\ \text{'I'm working'} \end{array}$	(Progressive)
	$\begin{array}{c} \mathbf{m=a\ yi} \\ X x\text{-----}> \\ \text{'I will go'} \end{array}$	(Prospective)

(ii) Forms in Descending Time

	$\begin{array}{c} \mathbf{me=w\acute{o}-a\ d\acute{o}} \\ <-----X\text{-----} \\ \text{'I work'} \end{array}$	(Imperfective)
DT	<-----	

1. The full meaning of the Progressive is given as 'I=be work do-PRG'
2. A completive BE is used for the Past **me=le d\acute{o} w\acute{o}-m'** 'I was working'.
3. The full meaning of the IPFV is 'I=do-IPFV work'.

11

Fula

(Northern, Senegambian, Atlantic)

(i) Forms in Descending Time

		'e-mi-wind-a	(Imperfective)
		<-----X-----	
		'I write'	
DT	<-----		
		mi-wind-ii	(Perfective)
		X----->	
		'I wrote'	
		mi-wind-a-t-a	(Situative)
		<X-----	
		'I will write'	

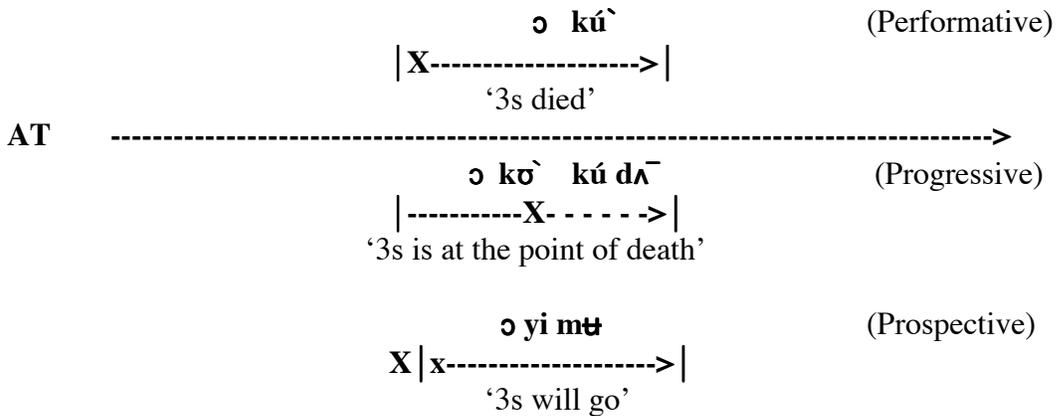
(i) Forms in Ascending Time

		mi--ɗon-wind-a	(Progressive)
		-----X----->	
		'I'm writing'	
AT	----->		

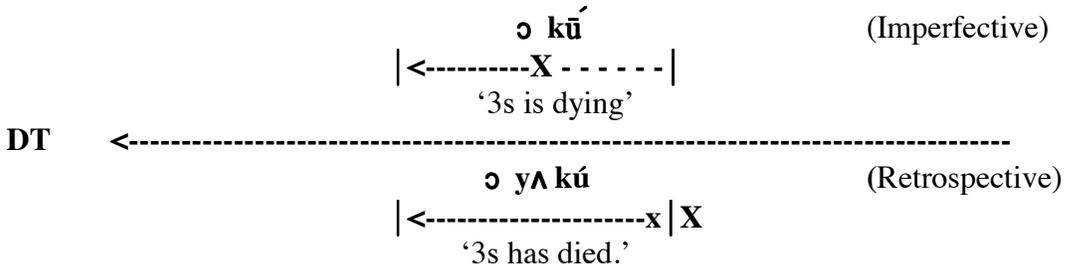
1. The **-a** of the active resembles the FV of Bantu, the form typically unmarked for aspect, carrying the basic aspect of the system, in this case the IPFV.
2. **'e** appears to be a preverb, since it doubles as a preposition meaning 'with'. It may be an element of focus to reduce the scope of the Vast Present, where a bare Imperfective often has a generic sense.
3. The marked completive corresponding to the Imperfective appears to be a Perfective, since there is no evidence to show that this form has present reference with stative verbs.
4. The status of **--ɗon** in Fula is an interesting question that requires further research.

12 Godié

(i) Forms in Ascending Time



(ii) Forms in Descending Time



1. The full meaning of the Progressive is given as 'He is in the process of dying'. (He be-at die place).
2. Both Prospective and Retrospective use auxiliaries.
3. The foundational forms of the paradigm are the unmarked Performative and the marked Perfective (the Imperfective suffix has disappeared leaving a mid tone).

13

Ijo

(Kolokuma dialect, Ijoid)

(i) Forms in Ascending Time

		$\dot{\text{i}} \text{ bo-mí}$ X-----> 'I came'	(Performative)
AT	----->		
		a bó timi-mí -----X-----> 'she was coming'	(Progressive)
		a bó-ḡímí X X-----> 'she will come'	(Prospective)

(ii) Forms in Descending Time

		$\acute{\text{i}} \text{ bó-yemi}$ <-----X----- 'are you coming?'	(Imperfective)
DT	<-----		
		a bó-dɔ̃ <-----x X 'she has come'	(Retrospective)

1. The use of **-mí** with statives showing present meaning, as in **akó -mí** 'it is bitter', is an indication of its status as a Performative.
2. The status of the Progressive is not clear: the example has a past reference. The auxiliary **timi** also forms combinations with Prospective and Retrospective.
3. There appears to be an alternate form of the Retrospective with a different auxiliary, **erí bó-nimì**, and a stative gloss, 'he is here'.

14

Jukun

(Jukunoid, Central Nigeria)

(i) Forms in Ascending Time

		ku-yak	(Performative)
		X-----> 'he went'	
AT	----->	ku-yak naa	(Progressive)
		-----X-----> 'he was going'	
		ku-rí-yak	(Prospective)
		X x-----> 'he will go'	

(ii) Forms in Descending Time

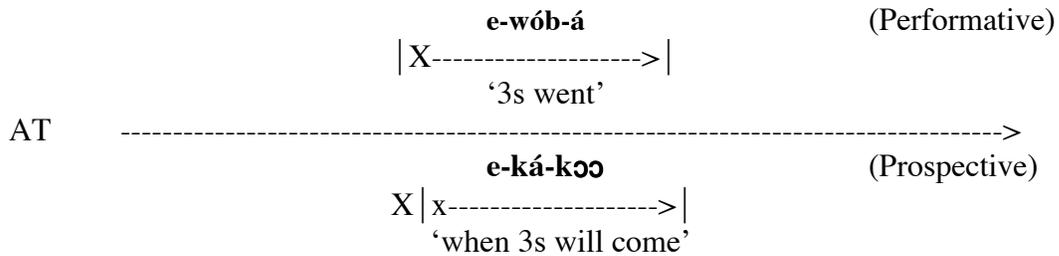
		ku-tí-yak	(Imperfective)
		<-----X----- 'he is going'	
DT	<-----	ku-ń-rì-yak	(Retrospective)
		<-----x X '3s has gone.'	
		ku-máá-yak	(Situative)
		<X----- 'when he goes'	

15

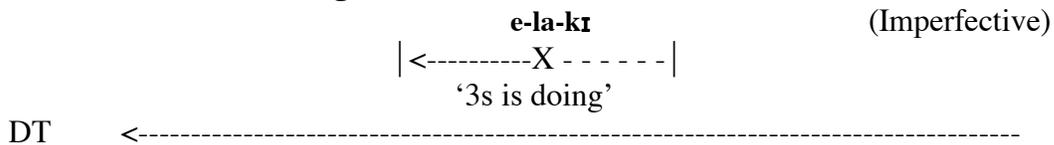
Kabiye

(Gur, Grusi)

(i) Forms in Ascending Time



(ii) Forms in Descending Time



1. The Performative has present reference with stative verbs: **e-piyi-a** ‘3s is black’, **e-sool-á** ‘3s loves’. It is also unmarked (no suffix) in some negative forms, in subordinate clauses, and in the Imperative.
2. The sketch here is incomplete. The Prospective form given is a subordinate clause, and there are other Prospective and Progressive forms the details of which are not clear.

16

Kisi

(Bulom, Mel, Southern, Atlantic)

(i) Forms in Ascending Time

	ò cìmbù X-----> '3s left'	(Performative)
AT	-----> ò cò cìmbò ɔ' -----X-----> '3s is leaving'	(Progressive)
	ò wà cìmbò ɔ' -----X-----> '3s was leaving'	(Completive Progressive)
	ò cò wà cìmbò ɔ' -----X-----> '3s will be leaving'	(Prospective Progressive)
	ò cìmbù níŋ x X-----> 3s already left	(Retrospective)

(ii) Forms in Descending Time

	ò cìmbù <-----X----- '3s leaves'	(Imperfective)
DT	<----- ò cò cìmbù X x-----> '3s will leave'	(Prospective)

- (i) The completive aspect is Performative: with active verbs it represents the past, and with stative verbs the present.
- (ii) The Retrospective is formed lexically by means of the adverb **níŋ**. The form is a Performative, comparable to English *he already left = he has gone*.
- (iii) There are three versions of the Progressive, one with the Incompletive form of the auxiliary (**cò** = Present), one with the Completive form of the auxiliary (**wà** =

- Past), and one where **cò** occupies the present and **wà** consequently represents the future.
- (iv) The auxiliary **cò** has two functions, one as auxiliary of the Progressive (with a nominal form of the verb (**cìmbò'ɔ'**), and one as the Prospective auxiliary with the Imperfective form of the verb (**ò cò cìmbù**).
 - (v) The form that is described as Habitual is a classic Imperfective of the Vast Present, as found in systems that have only aspectual contrasts and no tense contrasts. These forms, which represent ongoing activity in the whole expanse of Universe Time (the Vast Present) normally have a generic sense, which has led to their being described as aorists, the Greek term for a Perfective, when in fact they are Imperfectives.

17 Makaa

(Narrow Bantu, Bantoid)

(All forms have 1st person subject pronoun **mə̀**)

Stage 1
Vast Present

	mə̀ ʼ wííng [X----->]	Performative ‘I am about to chase’
----->		
	mə̀ ʼ ngə̀ wííng [-----X----->]	Progressive ‘I am chasing’
----->		
	mə̀ ʼ dɬ wííng [<-----X-----]	Habitual\ IPFV? ‘I (regularly) chase’
----->		
<-----	mə̀ mə̀ ʼ wííng [<-----x]X	Retrospective (PFT) ‘I have chased’

Stage 2
Tense contrasts

mə̀ a ʼ wííng	mə̀ ámə̀ wííng	mə̀ e ʼ wííng	mə̀ bá ʼ wííng
----->	----->	----->	----->
Far Past	Near Past	Near Future	Far Future

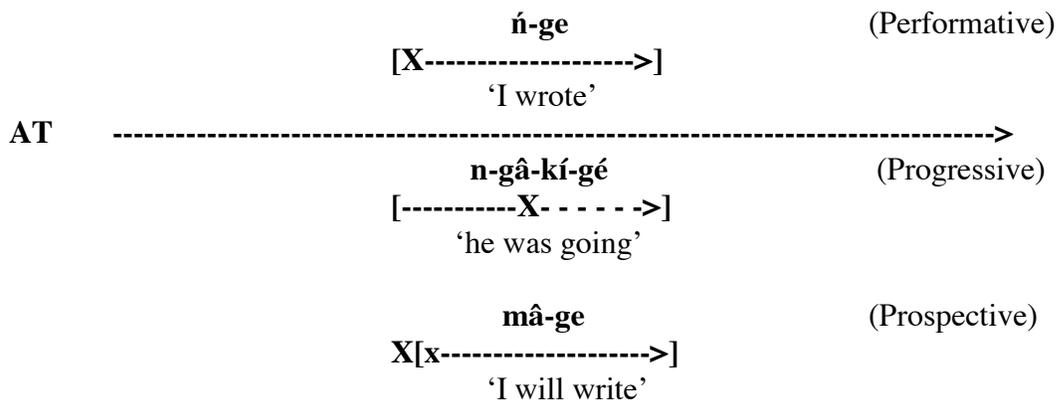
1. This is a typical Bantu pattern of a Vast Present with aspectual contrasts, followed by a later, derived level of tense contrasts. It may be compared with the pattern of Bukusu in Chapter 4, and to Aghem in Chapter 1.
2. The Performative is the unmarked aspect, and the form that is utilized for the tense contrasts.
3. It is normal for the Imperfective of the Vast Present, unless it is marked for some kind of focus, to have a generic sense.

18

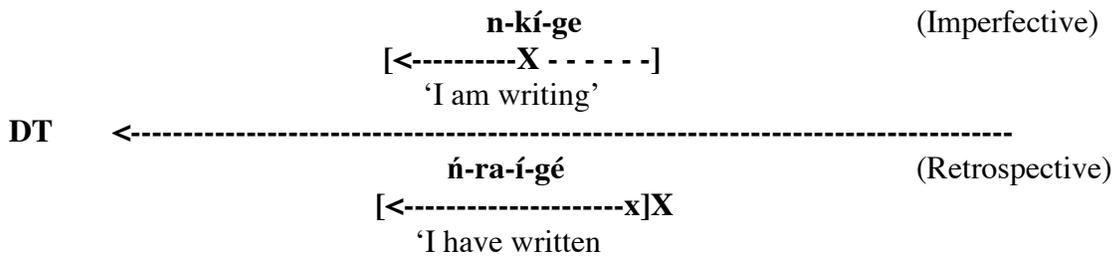
Obolo

(Lower Cross, Delta Cross, Cross River)

(i) Forms in Ascending Time



(ii) Forms in Descending Time



1. An Habitual is created by the reduplication of /-kí-/ under the form /-ké-kí-/.
2. The pattern of the system recapitulates that of Ejagham in Chapter 9.

19 Otoro

(Central Heiban, Kordofanian)

(i) Forms in Ascending Time

	ɲi gwu-maŋ-u [X----->] 'I saw'	(Performative)
AT	----->	
	ɲi gwɔ gwu-man-u [-----X----->] 'I am cooking'	(Progressive)
	ɲi gw-a-man-i X[x----->] 'I will cook'	(Prospective)

(ii) Forms in Descending Time

	ɲa-man-a nɔ [<-----X-----] 'Don't (you) cook!'	(Imperfective)
DT	<-----	
	ɲi gwu-man-i [<-----x]X 'I have cooked'	(Retrospective)

- i. Initial **gw(u)-** marks concord with the Subject Marker.
- ii. There are two forms of auxiliary *be*: Imperfective **gw-ɔ** and Completive **gwu-jɔ**.
- iii. Completive **gwu-jɔ** is used for Past reference: **ɲi gwu-jɔ gwu-man-u** 'I was cooking'.
- iv. The Imperfective is restricted in its usage to the Infinitive, Negative Imperative and Ventive. The latter is often axial: **man-a** 'cook and return', where the meal is the axis for the return.
- v. Final vowel **ɔ** or **u** marks Performative; **a** or **o** Imperfective; **ɛ** or **i** Subjunctive (which includes a variety of secondary or dependent usage).

20

Supyire (Senúfo, Gur)

(i) Forms in Ascending Time

	u fágá [X----->] ‘3s grabbed’	(Performative)
AT	----->	
	mù nyɛ na yu [-----X----->] ‘I am speaking’	(Progressive)
	pi sí ù bò X[x----->] ‘they will kill him’	(Prospective)

(ii) Forms in Descending Time

	u fágá-li [<-----X-----] ‘3s grabs’	(Imperfective)
DT	<-----	
	u a kàrè [<-----x]X ‘I have cooked’	(Retrospective)

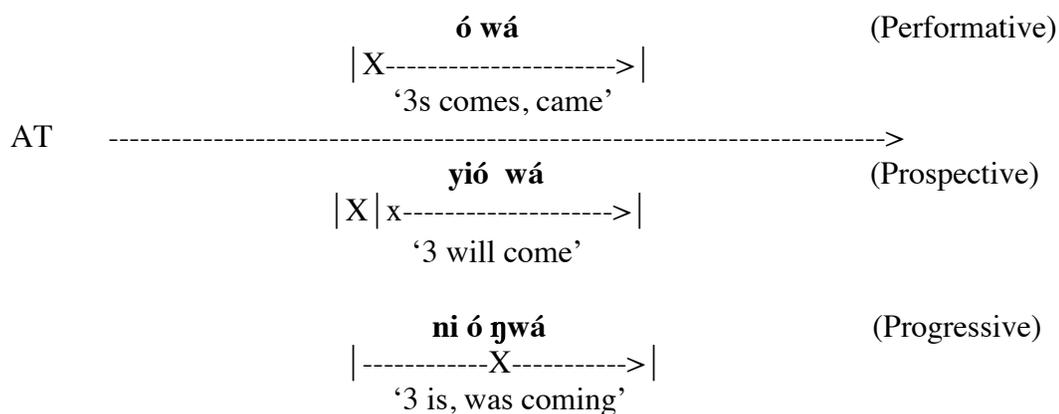
1. There is a suggestion of tense markers, **ná** Remote Past, **nî** Recent Past; but they can only be used with Performative forms of the verb, indicating an adverbial rather than tense function.
2. The Progressive auxiliary is **na; nyɛ** = ‘be’.
3. There are allophones of **-li**: **-ni**, **-re**, **-ge**, and changes of tone.
4. The Prospective auxiliary is **sí**; **ù** is the Direct Object.

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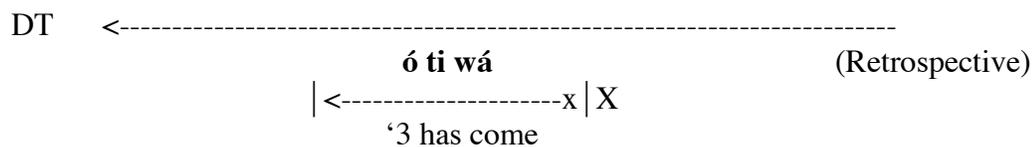
Yoruba

(West Benue-Congo)

(i) Forms in Ascending Time



(ii) Forms in Descending Time



1. Yoruba is strongly analytic, and the TA system contains only basic aspects.

22 Zande (Ubangi)

Level 1 (aspect only)

	(ká) pásà <-----X----- 'to cook'	(Imperfective)
--	---	----------------

Level 2 (Vast Present)

	mò ná-pàsà <-----X----- 'I am cooking'	(Imperfective)
DT	<-----	
	mò pasì X-----> 'I cooked'	(Performative)
AT	----->	

Level 3 (Past vs Non-Past)

	mó aa-pàsà <-----X-----		mó á-pàsà <-----X-----
DT	<-----	<-----	
	mó à-pásí X----->	mó pásí X----->	
AT	----->	----->	

Notes.

1. The past tense **mó aa-pàsà** has the meaning 'I was cooking'.
2. The non-past tense **mó à-pàsà** has the meaning 'I cook, am cooking'.
3. The past tense **mó à-pásí** has the meaning 'I cooked'.
4. The non-past tense **mó pásí** has the meaning 'may you cook' or just 'cook!'
5. This is an unusual pattern, but it still shows a staged system, with a Vast Present leading to a set contrastive tenses.

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